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U.S. Treasury Dept.
**ASSET DEPRECIATION
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The Department of the Treasury
July 1971

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Treasury Announces Adoption of Asset Depreciation Range (ADR) System

The Treasury Department has announced the adoption of final regulations placing in effect the liberalized system of depreciation for machinery, equipment and certain other property. These proposals were originally described by President Nixon on January 11, 1971.

The rules for the new system—called the *Asset Depreciation Range* or *ADR System*—are basically similar to those which Treasury proposed on March 12. However, a number of important changes have been made, including the creation of the Office of Industrial Economics in the Internal Revenue Service to collect data from tax returns and other sources to update guideline classes, guideline class lives, repair allowances, and other elements of the ADR System from time to time; the establishment of new record-keeping and reporting requirements for taxpayers using the system for use by the Office of Industrial Economics; and an entirely new provision permitting deductions for repair and maintenance expenditures based on guideline class “repair allowances”.

The Office of Industrial Economics will analyze schedules from taxpayers’ annual returns providing information as to equipment acquisitions and retirements; the Office will also assemble data on asset lives, repairs, replacement practices, and technological changes to be obtained regularly from industry and government sources. These studies—providing for the first time comprehensive and systematic data on the useful lives of assets and the rate of obsolescence resulting from technological advances—will provide a basis for future modifications of asset classes, the periods over which assets may be depreciated, and other aspects of ADR.

The changes in Treasury’s original proposals reflect written comments received following publication of the proposed regulations and testimony at public hearings held on May 3-5, 1971. Fifty witnesses testified during the three days of hearings. Their testimony, covering more than 800 pages, and the submissions of numerous written comments were studied intensively by Treasury and the IRS before adoption of the new rules.

Asset Depreciation Ranges

As in Treasury’s original proposals, the final regulations establish asset depreciation ranges for various classes of assets placed in service after December 31, 1970. A taxpayer may elect

to base depreciation of an asset on any number of years within the designated range of years for that particular guideline class. The election may be made annually and will apply to all eligible assets placed in service by the taxpayer in that taxable year.

The minimum and maximum of each asset depreciation range under the ADR System is 20 percent below to 20 percent above the "Guideline" lives presently in effect and as amended from time to time. The useful life is selected from this range for assets in the year they are acquired, and the life does not subsequently change for those assets even though the Guideline life for that asset class may be changed in the future for later acquisitions. A change from the original proposal provides that if Treasury lengthens an asset depreciation range during a year, a taxpayer may choose a depreciation period from the old range for asset acquisitions in that year.

After selecting the period of years for depreciating an asset, the taxpayer will determine his depreciation allowance under any of the allowable methods such as the straight line method, the declining balance method, or the sum of the years-digits method of depreciation.

Taxpayers using the ADR System will be required to account for assets in item accounts or in group accounts by the year placed in service—so-called closed and "vintage accounts." The final regulations require the taxpayer to attach to his income tax return each year a schedule showing asset acquisitions and retirements for the year, including the type and age of equipment retired.

As under the regulations proposed on March 12, the taxpayer may elect on an annual basis a new first year convention under which assets placed in service in the first half of the year are treated as placed in service as the beginning of the year, and assets placed in service in the second half of the year are treated as placed in service at the mid-point in the year.

The "reserve ratio test" contained in Revenue Procedure 62-21 will not apply to assets depreciated under ADR.

Salvage Value

Traditionally, salvage value—the amount the taxpayer estimates he will receive when he retires depreciable property from active service—has been treated in a variety of ways for tax purposes. Under ADR, the annual depreciation deduction is determined without taking estimated salvage value into account, but an asset may never be depreciated below its estimated salvage value. The ADR System continues this rule, but simplifies and makes uniform the treatment of estimated salvage value for depreciation purposes.

Under ADR, the taxpayer must establish the estimated salvage value of assets when he places them in service. The taxpayer is permitted by section 167(f) of the Internal Revenue Code to ignore salvage up to 10 percent of the cost of certain assets, and he estimates salvage value, if any, in excess of this amount. To eliminate controversies over minor differences in estimated salvage value, ADR provides that the taxpayer's estimate will not be adjusted by the Internal Revenue Service unless it is determined that the proper estimate of salvage value (after the application of section 167(f)) exceeds the taxpayer's estimate by more than 10 percent of the cost of the property.

Repair and Maintenance Expenditures

The ADR System also contains an important new mechanism designed to end controversies over whether expenditures for the repair, maintenance, rehabilitation or improvement of depreciable property may be deducted in the year paid or incurred, or must instead be "capitalized"—that is, be treated as capital improvements and be depreciated over the useful life of the property.

Both the regulations as proposed on March 12, 1971, and the final regulations provide that a taxpayer is first required to capitalize certain expenditures which are clearly capital in nature—which increase the productivity or capacity of an asset, adopt it to a substantially different use, or increase the productivity of the property. The balance of expenditures for repair, maintenance, and rehabilitation—the status of which as deductible items or capital expenditures is ambiguous—may be treated on an elective basis under the "repair allowance" provisions. Under the proposed regulations, the repair allowance was equal to one-year's depreciation on a straight line basis for the account in which the assets were included. Taxpayers electing to use the repair allowance could deduct amounts up to this level without question on condition that they capitalize the total of such expenditures over that level. The treatment was limited to repair and maintenance expenditures with respect to assets placed in service after December 31, 1970, and would have required the taxpayer to keep extensive and burdensome records.

The final rules greatly improve this system by establishing a specific percentage repair allowance for each guideline class based on a Treasury Department evaluation of statistical and other data by industry classes reflecting industry experience with respect to such expenditures. The allowance is extended to include repairs and maintenance expenditures with respect to assets placed in service before 1971. In general, the specific repair allowance amounts are substantially less than one-year's straight line depre-

ciation on the assets in the guideline class. Determining the repair allowance with respect to all assets falling in any guideline class made it possible to greatly simplify the ADR record-keeping requirements.

Other Changes

Other significant changes which Treasury made in the adopted rules include:

- Capitalization and depreciation of “property improvements” (the amount of repair and maintenance expenditures required to be capitalized where the repair allowance is elected) in vintage accounts rather than by charging such amounts to the depreciation reserve as under the proposed regulations.
- Automatic approval of changes in depreciation method from the double declining balance method, where allowable, to the sum of the years-digits method.
- Extension of the requirement that public utilities “normalize” the tax savings for ratemaking purposes to the savings resulting from the new first-year convention.
- Provision that public utilities previously entitled to use certain composite accounts and composite lives under the Guidelines may also do so under ADR.
- Extension of an option to taxpayers to exclude from the ADR System property which is eligible for the investment credit.
- Special provisions for electing the ADR System within 90 days of publication of the final ADR regulations by taxpayers whose taxable years ended in 1971.
- Classification of property which has attributes placing it in more than one guideline class in the class for the activity in which the property is primarily used.
- Provisions for correction and adjustment of depreciation accounts and depreciation taken where property has been mistakenly assigned to an incorrect guideline class.

Revenue Consequences

The Treasury Department estimates that adoption of the ADR System will result in a revenue loss of \$2.7 billion in the calendar year 1971; the average revenue loss over the 10 year period ending December 31, 1980, will be \$3.9 billion per year. These estimates are the amounts which would result if the basic levels of

investment and income in the United States remain unchanged despite the adoption of the ADR System; that is, they do not take into account substantial anticipated indirect or "feedback" benefits to the economy which would result in a higher level of GNP and hence higher tax revenues.

* * * *

In announcing adoption of the ADR System, Treasury also issued a statement describing the nature of depreciation, the history of the depreciation provisions of the tax laws, the need for abolishing the complex reserve ratio test, the reasons for adoption of the ADR System, the legal authority of the Treasury Department in adopting these changes by administrative action, and the anticipated economic effects of the changes. The report was prepared at the request of Senator Sam J. Ervin, Jr., Chairman of the Subcommittee on Separation of Powers, Senate Judiciary Committee.

In addition to the final ADR System regulations and the statement previously described, other documents made available include: an order establishing the new Office of Industrial Economics in the Internal Revenue Service; a Technical Information Release establishing the new repair allowances for each guideline class; and a survey of experienced revenue agents as to their experience with depreciation practices, including the application of the reserve ratio test. The Treasury Decision promulgating the ADR System regulations and the Order establishing the Office of Industrial Economics was published in the Federal Register for Wednesday, June 23, 1971.

The Adoption of the Asset Depreciation Range (ADR) System

The Asset Depreciation Range (ADR) system was adopted and filed with the Federal Register on June 22, 1971, as section 1.167(a)-(11) of the Treasury regulations under the Internal Revenue Code of 1954. Proposed regulations with respect to the ADR system were published in the Federal Register for March 13, 1971.¹ Written comments on the proposed regulations were submitted by interested persons, and public hearings were held on May 3-5, 1971.² All oral and written comments were carefully considered by the Treasury Department before promulgation of the final regulations.

The Treasury Department has concluded that the ADR system is an essential improvement in tax depreciation policy—both as a necessary improvement in the administration of the income tax laws and as an updating of depreciation allowances in light of current and anticipated conditions. Because of the widespread public interest in the ADR regulations, the Treasury Department is issuing this statement discussing the regulations, the major reasons for their adoption, and their anticipated economic effects.

Following a brief explanation of the nature of depreciation (pp. 2-5), the main features of the ADR system are summarized at pp. 6-9. The reasons for adoption of the ADR system are explained at pp. 47-68 following a review of the history of depreciation (pp. 9-27) and an explanation of the reserve ratio test (pp. 27-47). The statement then sets forth the legal authority of the Treasury Department to issue the ADR regulations (pp. 68-85) and concludes with a statement of the anticipated economic effects of these changes (pp. 86-97).

I. What Depreciation Is.

Section 167 of the Internal Revenue Code permits as a depreciation deduction a "reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)" of assets used in a trade or business or held for the production of income. The depreciation deduction is allowed in order that taxpayers may treat as an expense in determining taxable income an allocable part of the cost of business assets which have a limited life. A taxpayer is allowed to deduct from income each year regularly recurring expenditures such as repairs, consumable supplies, heat, light, and power, and salaries and wages. Similarly, if he buys a machine, the cost of the machine is also an expense of doing business and must in the same way be recovered out of income if the taxpayer is to continue in business.

¹ 36 *Fed. Reg.* 4885 (Mar. 13, 1971). Notice of a public hearing on the proposed regulations was also published at 36 *Fed. Reg.* 4885, amended by 36 *Fed. Reg.* 7012 (Apr. 13, 1971) and 36 *Fed. Reg.* 7240 (Apr. 16, 1971).

² The proposed regulations for the ADR system produced much comment and considerable controversy. Written comments were received from more than 150 individuals, corporations and associations, and 50 witnesses testified at the public hearings on the proposed regulations.

However, since the machine has a life which extends over a period of years, its cost must be allocated and recovered over a number of years.

This allocation is essential if income is to be clearly reflected. The cost of the machine may not be treated as an expense in the year the machine is acquired because that would result in understating income for that year. Neither may the allocation of the cost be spread over too long a period; income would then be overstated during the years of actual productivity of the machine. The depreciation deduction is designed to allocate the cost of the machine over the proper period of time, a period which is generally referred to as the "useful life" of the asset.

This "useful life" of assets is necessarily an estimate—a prognosis—of the period of time in the future during which the assets will be economically productive. The estimate of the period of time assets will be productively used—useful life—must be made when the assets are first placed in service and must take into account future events that are often unforeseeable and unpredictable. These include projected engineering and economic factors, technological developments in the industry, future market conditions, and other variables. Ordinarily, it may be expected that the period of substantial economic productivity for similar assets used by competitive taxpayers within the same industry will tend to follow the same pattern.

Various methods are used for establishing estimated useful lives; the guideline class lives and the ADR system are based on general industry experience. ADR allows an additional range of tolerance for changing conditions such as technological improvements, automation, increased foreign competition, and other factors. Section 167 requires that the "useful life" estimate take into account projected economic obsolescence.

In addition to establishing an estimated useful life, the depreciation deduction depends upon the *method* of allocating the cost over the "useful life." The straight line method is the simplest; the cost of the asset is allocated ratably, in equal amounts, over the "useful life." The declining balance method allocates a larger portion of the cost to the earlier years and a lesser portion to the later years. Thus, an asset costing \$100 with an estimated five year life would be charged at the rate of 20 percent, or \$20 per year, to each of the five years under the straight line method. The double declining balance method would charge \$40 to the first year (twice 20 percent, or 40 percent, times \$100), \$24 to the second year (40 percent times [\$100 minus \$40] the declining balance), \$14.40 to the third year, and so on. The sum of the years digits method produces deductions similar to those under the declining balance method.

Both the estimation of useful life and the application of the method of depreciation determine only the allocation of the total cost of business assets over a period of years. Estimating a shorter useful life does not increase the total amount of the deduction; it merely allows the same total deduction over a shorter period of time. The accelerated methods of depreciation, such as declining balance and sum of the years digits, permit a greater portion of the same total deduction in the earlier years.

II. Summary of ADR Provisions.

ADR makes five principal additions to existing depreciation regulations:

(1) Machinery and equipment placed in service after December 31, 1970, may be depreciated over useful lives selected from a range of years 20 percent below to 20 percent above the guideline lives established by the Treasury in 1962. The guideline lives will be amended from time to time in the future.³

(2) Taxpayers may adopt a new first year convention under which property placed in service in the first half of the taxable year is treated as placed in service at the beginning of the year and property placed in service in the second half of the year is treated as placed in service at the mid-point of the year.⁴

(3) The salvage value estimated by the taxpayer at the time the account is established ordinarily will not be changed by the Internal Revenue Service if the facts and circumstances known at that time do not warrant an adjustment of more than 10 percent of the cost of the assets in the account.⁵

(4) The taxpayer may elect a system of treating repair, rehabilitation, and maintenance expenditures under which a certain percentage of total expenditures for each guideline class may be deducted currently and any expenditures over that amount are capitalized and recovered through depreciation. Expenditures which are clearly capital in nature must be capitalized and recovered through depreciation in all events; the optional treatment extends only to expenditures whose status as deductible repair expenses or capital expenditures is ambiguous under present regulations. The percentage repair allowances were determined on the basis of Treasury's evaluation of statistical and other data reflecting industry experience with respect to such expenditures for asset guideline classes.⁶

(5) A comprehensive system of depreciation accounting is prescribed, requiring in particular the use of closed-end vintage accounts under which assets are accounted for by year of acquisition. Taxpayers are required to file annual schedules with their tax returns providing information on asset acquisitions and asset retirements by vintage accounts, showing the amount, type, and age of assets retired. The required information also includes

³ Reg. § 1.167(a)-11(b)(2) defines property which is eligible for the ADR system. Reg. § 1.167(a)-11(b)(4) provides asset depreciation ranges. The ranges appear in Revenue Procedure 71-25. See Internal Revenue Service Technical Information Release No. 1088, June 22, 1971 [hereinafter cited as TIR 1088]. No reserve ratio test will be applicable under ADR. See TIR 1088, § 3. The reserve ratio test is discussed at pp. 27-47, *infra*.

⁴ Reg. § 1.167(a)-11(c)(2)(ii). The existing first year convention permitting all property placed in service in a given taxable year to be considered placed in service in the middle of the year continues to be available. Reg. § 1.167(a)-11(c)(2)(iii).

⁵ Reg. § 1.167(a)-11(d)(1). The salvage value of each account must be estimated at the time of filing a tax return for the year assets are placed in service. Certain property which is eligible for ADR will also qualify under § 167(f) of the Internal Revenue Code which permits salvage value to be reduced by 10 percent of the basis of the property. In no event may an account be depreciated below salvage value after taking into account the reduction in salvage value permitted by § 167(f).

⁶ Reg. § 1.167(a)-11(d)(2). For the treatment of expenditures which are clearly capital in nature ("excluded additions"), see Reg. § 1.167(a)-11(d)(2)(viii). The repair allowance percentages are contained in Revenue Procedure 71-25. See TIR 1088. Reg. § 1.167(a)-11(f)(4)(e) requires taxpayers electing the ADR system to provide Treasury information with respect to expenditures for repair, maintenance, rehabilitation or improvement of assets to enable the Treasury to revise and update the percentage repair allowances.

experience with respect to the repair, maintenance, rehabilitation, or improvement of assets in each guideline class.⁷

This system of depreciation accounting and information reporting will enable the Treasury Department for the first time to compile data on an annual, systematic basis as to the periods of actual use of property which is subject to depreciation. Further, the system will provide data on repair and maintenance expenditures that will permit the refinement of rules for expensing or capitalizing such expenditures. In connection with the ADR system, a new office—the Office of Industrial Economics—is being established in the Internal Revenue Service to collect and review these data and other materials. This will provide a basis in the future for establishing or changing guideline classes, guideline lives, the ranges provided for various guideline classes, the repair allowances for various guideline classes, and other elements of the ADR system.⁸

III. Brief History of Depreciation.

For about 20 years after the introduction of our present income tax system in 1913, taxpayers were generally given freedom to determine depreciation allowances. The deductions claimed were not challenged unless it could be shown by clear and convincing evidence that they were unreasonable.⁹ In 1933 the House Ways and Means Committee recommended a 25 percent reduction of depreciation allowances for 1934, 1935, and 1936.¹⁰ However, the

⁷ Reg. § 1.167(a)-11(b) (3); Reg. § 1.167(a)-11(f) (4).

⁸ See *infra* at pp. 57-59. See Reg. § 1.167(a)-11(f) (4) which requires the filing of information with respect to the retirement of assets as a condition to the election of the ADR system. The Office of Industrial Economics was established by an amendment to § 1113.8 of the IRS statement on organization and functions published at 36 *Fed. Reg.* 849-90 (Jan. 19, 1971). This amendment was filed with the Federal Register on June 22, 1971.

⁹ Statement of the Honorable Douglas Dillon, Secretary of the Treasury, before the Joint Committee on Internal Revenue Taxation, Jan. 18, 1962, at 4.

The Revenue Act of 1913 provided that individual taxpayers could deduct from income "a reasonable allowance for the exhaustion, wear and tear of property arising out of its use or employment in the business. Act of October 3, 1913, 38 Stat. 167, § II(B). Corporate taxpayers were allowed "a reasonable allowance for depreciation by use, wear and tear of property, if any." 38 Stat. 172, § II(G) (b). In 1916 the depreciation provisions were modified for both corporations and individuals to provide for a reasonable allowance for depreciation of property arising out of its use or employment in the business or trade. Act of September 8, 1916, 39 Stat. 759 (individuals), 39 Stat. 768 (corporations).

See Bureau of Internal Revenue, Regs. 74 and 77, Art. 205, which provided that "[w]hile the burden of proof must rest upon the taxpayer to sustain the deduction taken by him, such deductions will not be disallowed unless shown by clear and convincing evidence to be unreasonable." See also, address by Under Secretary of the Treasury Marion B. Folsom, National Press Club Luncheon Meeting, March 24, 1954, where Under Secretary Folsom stated:

Prior to 1934, the taxpayer had wide leeway as to the amount which he could write off each year against his current income as allowance for the cost of machinery, equipment and buildings. So long as his policy was consistent and in accordance with sound accounting practice, the tax authorities raised little question, realizing that the cost could be written off only once.

¹⁰ In a report dated December 4, 1933, the Ways and Means Committee of the House of Representatives had recommended a reduction of depreciation allowances by 25 percent for the years 1934, 1935 and 1936. This proposal was rejected, however, after Secretary of the Treasury Henry Morgenthau, Jr., assured the Ways and Means Committee that the desired result could be achieved administratively, stating:

It is intended that this end shall be accomplished, first, by requiring taxpayers to furnish the detailed schedules of depreciation (heretofore prepared by the Bureau), containing all the facts necessary to a proper determination of depreciation; second, by specifically requiring that all deductions for depreciation shall be limited to such amounts as may reasonably be considered necessary to recover during the remaining useful life of any depreciable asset the unrecovered basis of the asset; and, third, by amending the Treasury regulations to place the burden of sustaining the deductions squarely upon the taxpayers, so that it will no longer be necessary for the Bureau to show by clear and convincing evidence that the taxpayers' deductions are unreason-

Treasury Department assured the Committee that similar results could be achieved administratively by shifting the burden of proof as to depreciable lives to the taxpayer, and this action was then taken by the Treasury Department.¹¹ The Committee approved this significant revision of the administration of the depreciation provisions in lieu of legislative action.¹² The effect of reducing depreciation allowances by 25 percent at that time would have been to increase tax revenues by \$65 million, an amount equivalent to 11 percent of business tax liabilities.

From that time forward, useful life was largely determined by reference to standardized lives prescribed in the Internal Revenue Service's Bulletin "F",¹³ and the taxpayer had a heavy burden of proof to sustain any shorter life for an individual asset. In 1942, Bulletin F was revised, and in 1946 the concept of the declining balance method of depreciation was recognized for the first time.¹⁴ Substantial controversy between taxpayers and the

able. These changes will increase the revenue substantially, and, although difficult to estimate, records indicate that the amount of the increase in revenue will equal that which would result from the proposal of the Ways and Means Committee.

Letter from the Secretary of the Treasury to the Chairman of the Ways and Means Committee, House of Representatives, January 26, 1934, in H. Rept. No. 704, 73rd Cong., 2d Sess. 8-9 (1934).

¹¹ T.D. 4422, XIII-1, C.B. 58 (1934).

¹² The Ways and Means Committee gave this explanation in its report on the Revenue Bill of 1934:

Your committee believes that the plan of the Secretary will be the best course to pursue. It will give greater equity and increase the revenue by as great an amount as the subcommittee plan. Consequently, no changes in the existing law are recommended. It should be observed that it is proposed not only to reduce the rates where they may be excessive, but also to reduce the allowance by spreading the unrecovered basis of any asset over the remaining useful life. This method of applying the depreciation rate to the cost of the asset reduced by depreciation previously allowed has long been used in Great Britain. In the opinion of your committee, it will automatically effect large reductions in these allowances.

H. Rept. No. 704, 73rd Cong., 2d Sess. 9 (1934). See also, S. Rept. No. 558, 73rd Cong., 2d Sess. 11 (1934).

¹³ The earliest edition of Bulletin "F" was a pamphlet dated August 31, 1920, under the Revenue Act of 1918 which contained no schedule of suggested average lives but defined depreciation as follows:

Depreciation means the gradual reduction in the value of property due to physical deterioration, exhaustion, wear, and tear through use in trade or business.

Obsolescence was treated as a separate and supplemental factor in computing the depreciation allowance where the facts supported an additional amount.

As to the rates or lives to be used in computing depreciation and obsolescence, the original Bulletin "F" of 1920 stated in the Introduction:

The Bureau does not prescribe rates to be used in computing depreciation and obsolescence, as it would be impractical to determine rates which would be equally applicable to all property of a general class or character. For this reason, no table of rates is published. The rate applicable and the adjustment of any case must depend upon the actual conditions existing in that particular case.

Bulletin "F" was first revised in January 1931 at which time the first schedule of suggested lives was published as a separate pamphlet entitled "Depreciation Studies—Preliminary Report of the Bureau of Internal Revenue." The schedules provided lives for individual assets used by industry groups (steel, food products, rubber goods, etc.).

¹⁴ In I.T. 3818, 1946-2, C.B. 42, the Internal Revenue Service held that the use of the declining balance method of computing depreciation would be approved for federal income tax purposes, provided it accorded with the method of accounting regularly employed in keeping the books of the taxpayer and resulted in reasonable depreciation allowances and proper reflection of net income for the taxable year or years involved.

Internal Revenue Service approval of the declining balance method of computing depreciation was a significant action. In enacting § 167(b) of the 1954 Code (which prescribes rules governing accelerated methods of depreciation), Congress sought to provide greater certainty for determining the proper amount of depreciation deductions. No objection was raised to I.T. 3818. See H. Rept. No. 1337, 83rd Cong., 2d Sess. 22 (1954). Section 167(b) provides that certain methods of computing depreciation will be allowed in determining a reasonable allowance for depreciation. The last sentence of § 167(b), however, expressly states that nothing in § 167(b) should be construed to limit or reduce an allowance otherwise allowable under § 167(a).

The Internal Revenue Service in Rev. Rul. 57-352, 1957-2, C.B. 150, amplified, Rev. Rul. 59-389, 1959-2 C.B. 89, clarified, Rev. Rul. 67-248, 1962-2 C.B. 98, approved the use of 150 percent declining balance depreciation for certain property that does not meet the require-

Internal Revenue Service as to proper depreciation allowances had begun following the 1934 action by Treasury and continued until the next major administrative change in depreciation policy, which occurred in 1953.¹⁵

In 1953, a new policy designed to reduce administrative controversies was promulgated in Revenue Ruling 90, which provided that beginning on May 12, 1953:

"[I]t shall be the policy of the Service generally not to disturb depreciation deductions, and Revenue employees shall propose adjustments in the depreciation deduction only where there is a clear and convincing basis for a change. This policy shall be applied to give effect to its principal purpose of reducing controversies with respect to depreciation."¹⁶

That policy was later incorporated into the regulations under the Internal Revenue Code of 1954.¹⁷ It is generally conceded, however, that the change was not thereafter effective in reducing substantially the number of depreciation controversies.¹⁸

The Internal Revenue Code of 1954 made major changes in the provisions of law affecting depreciation. Congress authorized the use of the declining balance method at twice the corresponding straight line rate and the use of the sum of the years-digits method of depreciation.¹⁹ Section 167(d) was added to authorize written agreements between the Internal Revenue Service and taxpayers specifically dealing with the useful life and rate of depreciation of any property. However, no change was made in the basic standard that there was to be allowed as a depreciation deduction "a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)" of property.

ments of § 167(c) of the Code. The authority of the Service to allow other methods of depreciation is also indicated by the language of § 167(j) (4) (b) and § 167(j) (5) (c) of the Code which expressly contemplates other methods of depreciation such as the sinking fund method described in Regs. § 1.167(b)-4.

¹⁵ See H. Rept. No. 1337, 83rd Cong., 2d Sess. 22 (1954) where the Ways and Means Committee stated: "Interpretation of the word 'reasonable' has given rise to considerable controversy." See note 20, *infra*, with respect to the 10 percent leeway in estimates of useful life provided by the House bill to eliminate "the needless friction in this area." See also, S. Rept. No. 1662, 83rd Cong., 2d Sess. 26, 28 (1954) and L. Kimmel, *Taxes and Economic Incentives* 47 (1950) ("Since 1934 depreciation has been one of the most controversial aspects of federal income tax administration.")

¹⁶ Rev. Rul. 90, 1953-1 C.B. 43. Guidelines for implementing this policy were set forth in Rev. Rul. 91, 1953-1 C.B. 44, *clarified*, Rev. Proc. 57-18, 1957-1 C.B. 748.

¹⁷ Reg. § 1.167(a)-(1)(b). The Revenue Act of 1942 provided that the excess of the proceeds from disposition of a depreciable asset over its adjusted basis would be taxed as capital gains. This change coupled with the accelerated depreciation provisions of the 1954 Code suggested the refinement of the "useful life" concept which was reflected in the regulations issued in 1956. The 1956 regulations moved away from the concept of physical life, focusing instead on the period of use in the taxpayer's business. Section 1245 of the Internal Revenue Code, added in 1962, reversed the provisions of the Revenue Act of 1942 and provided that gains on disposition of certain assets would be ordinary income—not capital gains—to the extent of depreciation deductions previously taken. Section 1245 significantly lessened the need for restrictive interpretations of useful life and facilitated the 1962 depreciation reform discussed *infra* at pp. 20-25. See S. Rept. No. 1881, 87th Cong., 2d Sess. 95 (1962).

¹⁸ One of the reasons for the 1962 depreciation revision which is discussed at pp. 20-25, *infra*, was the elimination of many administrative problems. Statement by Mortimer M. Caplin, Commissioner of Internal Revenue, in connection with the release of *New Depreciation Guidelines and Rules*, July 11, 1962.

¹⁹ Internal Revenue Code § 167(b).

The 1954 Code as passed by the House would also have provided that the depreciation period used by the taxpayer could not be changed unless the period estimated by the Internal Revenue Service varied by more than 10 percent from the period estimated by the taxpayer. The Report of the Ways and Means Committee stated that this provision was not intended to affect the 1953 administrative action of Revenue Ruling 90.²⁰ The Senate Finance Committee deleted the 10 percent statutory range of tolerance concluding that the objectives of the provision had already been achieved by the 1953 administrative action.²¹

In the period following the enactment of the 1954 Code, the Treasury Department continued to study depreciation questions, including the methods of determining useful life. In the late 1950's, a major project to revise Bulletin F was undertaken, but Treasury subsequently indicated that the results of this study "did not give adequate recognition to increasingly rapid obsolescence and, consequently, did not indicate a sufficient shortening of useful lives in many cases."²²

In 1962, Revenue Procedure 62-21, the so-called Guidelines, introduced a fundamental change in the concept of depreciation.²³ As a substitute for the thousands of asset classifications of Bul-

²⁰ See H. Rept. No. 1337, 83rd Cong., 2d Sess. 24-25 (1954) where the Ways and Means Committee stated:

The bill also provides that the Internal Revenue Service may not disturb a depreciation rate used by a taxpayer so long as the useful life determined by the Internal Revenue Service to be correct does not differ by more than 10 percent from the useful life used by the taxpayer.

At the present time, the Internal Revenue Service has announced that, as a matter of administrative policy, internal revenue employees will not disturb depreciation deductions unless there is a clear and convincing basis for a change. The committee's bill is not intended to affect that particular administrative policy in any way nor is it intended to be a statutory substitute for that policy. However, if the Commissioner finds by clear evidence that the useful life of property as estimated by the taxpayer is too short, but the difference between the Commissioner's estimate and that of the taxpayer is 10 percent or less, the bill provides that no change can be made by the Commissioner. Moreover, should the Commissioner decide to withdraw present administrative policy, the bill provides statutory assurances to taxpayers that in no event will Internal Revenue Service employees disturb the taxpayer's estimate of useful life where judgment as to its duration differs by less than 10 percent.

It is hoped that by providing a minimum statutory leeway for the taxpayer in making his estimates of useful life, most of the needless friction in this area will be eliminated.

²¹ See S. Rept. No. 1662, 83rd Cong., 2d Sess. 28 (1954) where the Senate Finance Committee stated:

Your committee has eliminated the '10-percent leeway' rule provided by the House bill, designed to assure a specific zone of administrative tolerance in the determination of service life. Under this provision, the Internal Revenue Service would not be permitted to disturb a depreciation rate unless the corrected rate differed by more than 10 percent from the useful life uses [sic] by the taxpayer. It appears that this provision would be considered inadequate and unsatisfactory by some taxpayers, and might be a substantial source of misunderstanding and distortion. The practical effect of eliminating this provision in assuring flexibility in administrative policy should not be great since policies already announced by the Internal Revenue Service under recent rulings should afford taxpayers freedom from annoying minor changes which would disturb the original estimate of service life.

²² Statement of the Honorable Douglas Dillon, Secretary of the Treasury, before the Joint Committee on Internal Revenue Taxation, January 18, 1962, at 6.

In 1957, the Internal Revenue Service, at the request of the Treasury Department, undertook a study to revise and update Bulletin "F" as announced in the Internal Revenue Bulletin 1957-1, page 26. The study group, as announced by Commissioner Harrington in a news release dated February 18, 1957, consisted of two outside consultants, a representative from the Internal Revenue Service and a representative from the Treasury Department.

The conclusions of this study were presented to Commissioner Harrington on February 7, 1958, with a wide variation in the recommended increase or decrease of estimated lives for various industries. For most industries no change in life from the 1942 Bulletin "F" was recommended. In some cases as much as a 10-25 percent reduction in lives was recommended (water transportation, optical manufacture), and in other cases an increase of 10-15 percent was recommended (aircraft and motor transportation, printing and publishing).

²³ 1962-2 C.B. 418.

letin F, assets were grouped by broad industrial classifications and by certain broad general asset classifications, with a "guideline life" established for each of these classes. Approximately 75 classes were created. Taxpayers were advised that if their depreciation deductions for assets within a particular class did not exceed the amounts that would be obtained by applying the guideline life to all assets falling within that class, their deductions would not be disturbed. A "reserve ratio test" discussed in detail below (pp. 27-47), was also introduced, but its application was suspended for three years.

The guideline lives were approximately 30 percent to 40 percent shorter than Bulletin F lives.²⁴ It was anticipated that the changes would result in a revenue loss of \$1.5 billion, or approximately 5.5 percent of annual business tax liabilities at that time. In discussing the revenue loss, President Kennedy stated:

"Business spokesmen who have long urged this step estimate that the stimulus to new investment will be far greater—perhaps as much as four times greater—than the \$1.5 billion made available. In any event, it is clear that at least an equal amount will go into new income producing investment and eventually return to the Government in tax revenues most, if not all, of the initial costs."²⁵

At the same time, President Kennedy also explained the reasons for the change, stating:

"Although the executive branch has long been authorized by statute to allow reasonable deductions for depreciation based on obsolescence as well as wear and tear, the Internal Revenue's Bulletin F has never been changed since its publication in 1942, despite the vast and apparent changes in the rate at which modern machinery in a new age of technology can become obsolescent and require replacement."²⁶

Douglas Dillon, Secretary of the Treasury, added:

"The guidelines will not be allowed to become outdated—as was the case for so long with Bulletin F, which the new guidelines replace. Our revision of depreciation guidelines and rules recognizes that depreciation reform is not something that, once accomplished, is valid for all

²⁴ *Depreciation Guidelines and Rules*, U.S. Treasury Department, Internal Revenue Service Publication No. 456 (7-62), July 1962, at 1 [hereinafter cited as *Depreciation Guidelines*]. The guideline lives averaged 32 percent less than those contained in Bulletin "F" for the manufacturing industry and 21 percent less than those in use by manufacturers covered in the Treasury survey. Statement by President John F. Kennedy on Depreciation Guidelines and Rules, July 11, 1962 [hereinafter cited as statement by the President, July 11, 1962].

The guideline lives were also estimated to be "15 percent shorter than the lives in actual use by 1,100 large corporations which hold two-thirds of all the depreciable assets in manufacturing." Statement by Douglas Dillon, Secretary of the Treasury, on the issuance of the *New Depreciation Guidelines and Rules*, July 11, 1962 [hereinafter cited as statement by Secretary Dillon, July 11, 1962]. Each taxpayer was instructed to "continue to base his depreciable lives on his own best estimate of the period of their use in his trade or business," but taxpayers could use the guideline lives as a matter of right for a period of three years and thereafter unless there were clear indications that the taxpayer's replacement practices did not conform with the depreciation claimed and were not even showing a trend in that direction. See text at pp. 27-47, *infra*.

²⁵ Statement by the President, July 11, 1962.

²⁶ *Id.*

time. It reflects an administrative policy dedicated to a continuing review and updating of depreciation standards and procedures to keep abreast of changing conditions and circumstances. The experience under the new guideline lives, industry and asset classifications, and administrative procedures, will be watched carefully with a view to possible corrections and improvements. Periodic reexamination and revision will be essential to maintain tax depreciation treatment which is in keeping with modern industrial practices.”²⁷

However, depreciation allowances and procedures have not been significantly revised since 1962. The 1962 Guidelines established no method for regular, systematic collection of data as to asset acquisitions and retirements by taxpayers, and except for changes in the reserve ratio test in 1965, no significant changes have until now been made in the guideline classes or guideline lives.

The 1962 action represented a fundamental change in concept because it permitted depreciation deductions based on “useful lives” determined by reference to industry-wide experience but substantially shortened from the experience shown by most taxpayers within an industry. It treated assets as a class, rather than as individual assets—as a stock of capital even though assets within a class were heterogeneous with respect to ages, useful lives, and physical characteristics. Assets within the class would have individual lives far longer and far shorter than the guideline class life. For example, the category “office furniture and equipment,” which includes items as diverse as desks and chairs and electronic computers, was established and given a single guideline life of 10 years. Similarly, broad industrial categories were given a single guideline life. For example, all manufacturing assets used in the “chemical and allied products” industry were given a guideline life of 11 years. All assets used in air transport, regardless of their nature, were grouped in a single class for which a guideline life of six years was established. This list of guideline class lives was published as a substitute for Bulletin F.²⁸

Thus, the 1962 action abandoned the asset by asset approach of the prior administrative treatment of depreciation, which had generally resulted in a particularized determination of the useful life of each of the taxpayer’s assets. While a reserve ratio test was introduced, though suspended in its application, it was also to be applied with reference to guideline classes. Except as the reserve ratio test was violated, taxpayer depreciation deductions were in effect governed by industry-wide standards, reflecting a liberal determination of industry averages of periods for which broad classes of assets were used. The guideline procedure—Revenue Procedure 62-21—made no provision, however, for the treatment of repair and maintenance expenditures.²⁹

²⁷ Statement by Secretary Dillon, July 11, 1962.

²⁸ *Depreciation Guidelines* at 1.

²⁹ *Id.* at 54 (Question and Answer No. 33).

Except for amendments to the reserve ratio test in 1965, discussed at pages 34-38, no significant administrative or legislative changes in depreciation occurred from 1962 to 1969.³⁰ In the Tax Reform Act of 1969, Congress added section 167(j) to the Code limiting the use of certain accelerated methods of depreciation in certain cases and made certain other changes in the methods of depreciation without affecting the reasonable allowance standard.³¹ The repeal of the investment credit by the 1969 Act provoked requests from members of Congress that the Treasury Department undertake a study of the adequacy of then existing depreciation allowances. Treasury officials informed the House Ways and Means Committee that administrative depreciation reform would be considered. In July 1970, in response to a request from Senator Jacob K. Javits, the Treasury Department submitted to him a detailed analysis of certain economic considerations with respect to various depreciation changes.³²

During 1970, the Treasury Department also gave extensive assistance to the President's Task Force on Business Taxation which recommended revision of depreciation policies in its report published in September 1970. Following further study, the outlines of the ADR system were announced on January 11, 1971, and proposed regulations were published on March 13, 1971.

Over 150 written comments were received with respect to these proposals. Three days of public hearings were held on May 3-5, 1971, at which 50 persons testified, resulting in over 800 pages of transcript. The written comments and the testimony were thoroughly considered prior to adoption of the regulations on June 22, 1971. Two major changes in the proposed regulations were made as a result of the comments and testimony:

- (1) The Office of Industrial Economics was established to insure that guideline classes, guideline lives, the repair allowances for various guideline classes and other elements of the ADR system do not become outdated in the future.

- (2) The repair allowance has been simplified and made more generally applicable; a specific repair allowance has been provided for each guideline class.³³

³⁰ A study prepared by a member of the Treasury staff, Richard L. Pollock, was published in 1968. R. Pollock, *Tax Depreciation Policy and the Need for the Reserve Ratio Test* (1968).

³¹ The Tax Reform Act of 1969, Pub. L. 91-172, added § 167(j) to the Code which limits depreciation on new nonresidential property acquired after the effective date of § 167(j) to 150 percent declining balance depreciation. Used property thereafter acquired is limited to straight line depreciation, except that 125 percent declining balance depreciation can be used for certain used residential property. Section 167(k) of the Code specifically provided that depreciation on certain rehabilitation expenditures for low and middle income housing can be taken on a straight line basis over a 60 month period. Section 167(l) was added to freeze the then-present situation with respect to the treatment of depreciation for rate making purposes by certain public utilities. Sections 169, 184, and 187 were added to the Code to permit the cost of certain pollution control facilities, railroad rolling stock, and coal mine safety equipment to be recovered over a five year period. None of these sections, however, will limit or reduce an allowance for depreciation otherwise allowable under § 167(a).

³² See 116 *Cong. Rec.* E6964 (daily ed. July 23, 1970).

³³ A number of more technical changes were also made in the final regulations as a result of written and oral comments received on the proposed regulations. See Treasury News Release announcing adoption of the ADR regulations (June 22, 1971).

IV. The Reserve Ratio Test.

The ADR system will be applied without a reserve ratio test. An understanding of this test is essential to a discussion of the reasons for adopting the ADR system.

Concept and Method

The reserve ratio test was adopted as part of the guideline procedure in 1962, subject to a three year moratorium on its actual application, and was later revised and modified in 1965. The test was to provide a mechanical method or set of procedures to test whether the taxpayer's actual period of use conformed to the "useful life" for tax purposes. Because of certain tolerances, if the taxpayer's actual replacement schedule for depreciable assets in a particular guideline class was no more than 20 percent longer than the guideline life the test would be considered to be met.³⁴ Its stated purpose was to provide "an objective basis for comparing the tax lives used and replacement practice."³⁵ In its basic concept, the reserve ratio test utilized the principle that the relationship between the average useful life for tax purposes of assets in group, composite, or other multiple asset accounts can be compared with the average actual period of use by comparing the amount of accumulated depreciation reserves with the total investment in depreciable assets in the account. This provides a measurement of total past depreciation deductions relative to the depreciation base.

A simple example will illustrate the basic concept of the test: assume a taxpayer buys five machines, each costing \$100 on July 1 each year which it depreciates on a straight line basis over a three year useful life and retires each machine when it has been in use for exactly three years. After the taxpayer has been in business for over three years, it will have in use at the end of each year five six month old machines, five one and one-half year old machines, and five two and one-half year old machines. The total depreciation taken on all the machines still in use would be:

In the six month old machines (5 times 1/6 of \$100)	\$ 83.33
In the one and one-half year old machines (5 times 1/2 of \$100)	250.00
In the two and one-half year old machines (5 times 5/6 of \$100)	416.67
Total	<u>\$750.00</u>

³⁴ *Depreciation Guidelines* at 2-3, 6, 52-53. Question and Answer 28 provided:

Question: What do the upper and lower limits of reserve ratio ranges represent?

Answer: The upper limit of the reserve ratio range is the reserve ratio for a taxpayer's guideline class which would result if the assets in that class were used for a period 20 percent longer than the class life used by the taxpayer. The lower limit of the reserve ratio range is the reserve ratio for a taxpayer's guideline class which would result if the assets were used for a period 10 percent shorter than the class life used by the taxpayer.

³⁵ *Id.* at 6.

Since the total cost of the 15 machines was \$1,500, the reserve ratio—the ratio of total depreciation to original cost—would be 0.5. If the machines were actually used for four years, but depreciation was continued to be based on a three year useful life, the total depreciation taken on all machines in use at the end of the fourth year would be \$1,250, the total cost of machines still in use would be \$2,000, and the reserve ratio would be 0.625.

A “normal” reserve ratio (0.5 in the above example) which would occur if the tax life conforms to the actual period of use can be determined under various sets of circumstances and can be used as a test ratio.

In essence, the reserve ratio test relied on a comparison of the taxpayer’s reserve ratio with the test ratio—the ratio which would exist if the retirement schedule conformed to the presumed life cycle authorized by the guideline. If the taxpayer has sufficient amounts of fully depreciated property still in use, these assets will have depreciation reserves equal to their cost and his actual reserve ratio will be higher than the test reserve ratio. Conversely, if the taxpayer retires amounts of assets before their useful life for tax purposes has expired, the ratio of depreciation reserves to total asset costs will be lowered.

In cases where the reserve ratio test applied, if the taxpayer’s reserve ratio exceeded the test ratio, subject to certain tolerances, exceptions, and transition allowances, there was a presumption that (1) his account contained more than the acceptable amount of overage assets, (2) his replacement cycle was therefore too much slower than the guideline life cycle, and (3) his tax life used for depreciation purposes was therefore unrealistic and should be lengthened.

Tabular Version of the Test (1962)

The initial guideline procedure of 1962 provided only the “tabular” version of the reserve ratio test, so called because it relied on a series of tables which prescribed test ratios for different methods of depreciation, different test lives, and different rates of growth for the asset account.³⁶ Provision in the tables for a wide range growth of rates, both positive and negative, was essential to cover the variety of possible situations. Fast growing accounts with a heavy representation of new assets which had little accumulated depreciation would have lower reserve ratios than stable or declining accounts. The latter would tend to have high ratios due to the heavy representation of older assets with large accumulated depreciation reserves. There were a number of steps in applying the tabular form of the test³⁷ but the net result

³⁶ *Id.* at 31-42.

³⁷ Application of the tabular form of test involved the following steps and procedures:

1. *Determination of taxpayer’s reserve ratio.* First, the reserve ratio was determined by dividing the depreciation reserve for a particular class of assets by the original cost plus capital additions and improvements (or other basis) of these assets.

2. *Ascertaining the rate of growth.* The next step was to ascertain the rate of growth of the guideline class by computing the ratio of assets in the class at the close of the current year to the assets in the class one replacement cycle earlier. This step was necessary because the expected reserve would be lower as the growth rate was higher.

3. *Test life determination.* The taxpayer would then proceed to find his “test life.” The test life would be:

—the guideline life, if the taxpayer used a life equal to or longer than the guideline;

was that if the taxpayer's ratio exceeded the upper limit of the indicated test ratio range, he was potentially subject to a lengthening of his tax lives. Conversely, if his ratio was below the lower limit, he was eligible for a shortening of tax lives. The lengthening was generally 25 percent under the original 1962 action, but was later liberalized; a shortening of tax lives was generally 15 percent.

Initial Three Year Moratorium

For the first three years of the guideline procedure, the use of guidelines was permitted as a matter of right without regard to the reserve ratio test. During this initial three year grace period or moratorium, taxpayers were not required to meet the test and apparently many taxpayers would not have initially qualified for the guidelines or have been able to continue their use if the reserve ratio test had been immediately effective.

Trending Rule

In addition to the three year moratorium, taxpayers were initially granted a transition rule. This rule gave them a period (beginning with 1962) equal to the guideline life for the class in question—which varies from three to 60 years—to bring the reserve ratio within the upper limit of the applicable reserve ratio range, provided the ratio was moving or trending toward the limit in this period.³⁸

Availability of "Facts and Circumstances" Test

If the taxpayer failed the reserve ratio test, he could always demonstrate by reference to his particular "facts and circumstances" that his depreciation deduction was nonetheless justified. Thus, the reserve ratio test was merely an additional procedure interposed in the depreciation administrative process prior to the traditional individualized review of all relevant facts and circumstances.

Guideline Version of the Test (1965)

As part of the revisions in the 1962 guideline procedures announced in 1965, a new and alternative form of the reserve ratio

- the life previously justified, where he used a below guideline life which was equal to or longer than the life previously justified;
- the life used in the preceding year, where the taxpayer wished to establish a below guideline life shorter than he had previously used;
- the life used in the current year, where the taxpayer wished to justify use of the life he had been using for half a cycle; or
- the life to which the taxpayer had been lengthened, in all cases where an upward adjustment in life had been made.

4. *Comparison of reserve ratio with reserve ratio range in "reserve ratio table."* The final step in applying the test was to locate the appropriate reserve ratio table depending upon the depreciation method (straight line, 200 percent declining balance, 150 percent declining balance, or sum of the years digits), and ascertain the cell in the table corresponding to the taxpayer's test life and growth rate. If the taxpayer's ratio exceeded the upper limit of the indicated test ratio range, he was potentially subject to an upward life adjustment in accordance with prescribed rules. If his ratio was below the lower limit, he was eligible for a downward life adjustment. See *Depreciation Guidelines* at 42 for illustrative adjustments of class lives.

³⁸ Proper trending was shown if the amount by which the reserve ratio exceeded the upper limit for any taxable year was lower than it was for any one of the three preceding taxable years. *Depreciation Guidelines* at 28.

test was introduced.³⁹ The original tabular form of the test had proved defective since its assumption of a regular compound interest growth pattern was unrealistic. The tabular form favored taxpayers whose growth reflected particular irregularities. At the same time, the tabular form unfairly discriminated against taxpayers whose growth had been concentrated more towards the earlier part of the cycle, and whose actual ratio was therefore high relative to the test ratio. Other defects of this type made it necessary to rely on the 20 percent leeway to avoid unwarranted failures of the reserve ratio test, and even this tolerance was not always adequate.

To cope with this problem, the "guideline" form of the reserve ratio test was introduced in 1965. This alternative was an effort to allow the taxpayer to compute a reserve ratio standard tailored to his individual circumstances—in particular, his special pattern of growth or irregular changes in capital expenditures during the preceding life cycle.

Despite the deficiencies of the tabular form of the test, it continued to be made available to taxpayers; the option to use the tabular form or the guideline form was made an annual one. Taxpayers who failed under one version of the test might qualify under the other. Like the tabular form, the guideline form of the test built in a 20 percent leeway in the retirement schedule as compared with the tax life.⁴⁰

Transitional Allowance

Two additional rules were introduced in 1965. Both were applicable for a period of one guideline life beginning in 1965. A "transitional allowance rule" in effect extended the three year moratorium by raising the upper limit of the standard reserve ratio (either tabular or guideline form) by a specified number of

³⁹ Rev. Proc. 65-13, 1965-1 C.B. 759.

⁴⁰ A taxpayer testing or electing to use the guideline form of the reserve ratio test followed a procedure outlined in the following headings. The basic objective was to carry out a comparison of the taxpayer's actual reserve ratio with the reserve ratio limit determined by dividing the total "cost of assets" acquired during the "extended life" for the guideline class into the total "computed reserve" for the same period.

Costs of assets. The cost of assets for any year was the annual investment in assets (without reduction for retirements or depreciation) in the guideline class. The annual investment included the cost of all assets acquired during the year regardless of present status, i.e., it included assets even if they had been discarded or depreciated in part or in full. For example, if \$30,000 of assets were acquired in 1959 and by 1965, \$5,000 of those assets had been sold or retired, \$30,000 was nevertheless to be entered.

Extended life. The extended life, for any guideline class, was the test life for that class, usually guideline life, plus 20 percent of such test life. In effect this permitted the taxpayer to qualify under the test although he had overage or fully depreciated assets on hand equivalent to the acquisitions in the 20 percent leeway period prior to the preceding life cycle.

If the "extended life" included a fractional part of a year, the fractional part applied to the year preceding the oldest full year of the extended life and only the proportional part of the cost of assets for such year was to be used. For example, in the case of a 14.4 year extended life, the fraction (40 percent) would apply to the 15th preceding year. For such 15th year, only 40 percent of the cost of assets was to be entered.

Computed reserve. To obtain the computed reserve, the cost of assets for each year was multiplied by the appropriate annual factor from the table of annual factors. That table provided annual factors appropriate for each test life and depreciation method (e.g., straight line) used for a guideline class.

Different depreciation methods applied to a guideline class account. If the taxpayer used more than one depreciation method with respect to different assets in the same guideline class, he was to record the cost of assets depreciated under each method on a separate form. However, in computing the reserve ratio limit, the total cost of assets on each such form was to be added and the grand total divided by the grand total of the total computed reserve for each such computation.

Mortality dispersions. Like the tabular form, the guideline form assumed all the assets in the account were retired at the same time with no dispersion of mortality around the average life. This has been characterized as capricious and nonsensical. *ADR Hearings* at 357-358 (testimony of George W. Terborgh).

percentage points, starting at 15 for 1965 and phasing out gradually over the guideline life period. One-third of the 15 percentage points (five points) phased out over the first half of the transitional period; the remaining two-thirds (10 points) over the second half of the period.

Minimal Adjustment Rule

A "minimal adjustment rule" reduced substantially the permissible lengthening of tax lives under the 1962 Guidelines. Under the 1962 guideline procedure, if the reserve ratio test was not met, and the taxpayer was unable to demonstrate, under all the facts and circumstances, that no adjustment was warranted, useful lives could be lengthened by roughly 25 percent.

Under the 1965 "minimal adjustment" rule, if (1) the trending requirement was not met, (2) the "transition limit" (the sum of the upper limit of the standard reserve ratio range plus the transitional allowance) was exceeded, and (3) if the taxpayer was unable to demonstrate, under the facts and circumstances, that a lengthening adjustment was not warranted, useful lives were to be lengthened under a sliding scale. If the actual reserve ratio exceeded the transition limit by less than 10 points, the useful life could not be lengthened by more than 5 percent. If the transition limit was exceeded by 10 or more points, the useful life could not be lengthened by more than 10 percent.⁴¹

Deficiencies of the Test New and "Green" Accounts

A major weakness of the reserve ratio test in both the tabular and guideline forms is its inability to furnish any significant measure of the correspondence between tax life and replacement cycle for a new account until a considerable period of time has passed. To determine whether the upper limit has been exceeded, the time required would be a period equal to at least 120 percent of the tax life; the new account could not possibly fail the reserve ratio test for a period equal to the tax life plus the 20 percent leeway allowed by the test.

Since a large proportion of businesses are short-lived or operate under conditions where part or all of their depreciable property would be characterized as a "green account," the reserve ratio test has only limited relevance. In addition, since a new business or one with new or "green" accounts was in effect permitted to use the guideline life without any effective test of its retirement schedule for one life cycle plus the leeway afforded under the reserve ratio test, the reserve ratio test gave an advantage to new businesses. By contrast, the depreciable property accounts of older businesses would be subjected to the test immediately after the three year moratorium plus the expiration of the transition allowance. Therefore, as between two businesses seeking to use a liberal guideline life—one a new business and the other a business with a historical experience (a seasoned ac-

⁴¹ Rev. Proc. 65-13, 1965-1 C.B. 759, 768-771.

count) which might subject it to the reserve ratio test and so deny it the right to use the shorter life—the test tended to give more favorable treatment to the new business by assuring it undisturbed use of the guideline life for a considerable period.

Stand-by Property

One of the unresolved problems in the operation of the reserve ratio test was the treatment of overage property retained for stand-by purposes or for a possible change in demand or other economic conditions which would make its use profitable. In determining the taxpayer's actual reserve ratio for purposes of the test, all fully depreciated assets still in use or in the taxpayer's possession generally were to be included in the appropriate guideline class property account, and a 100 percent depreciation reserve for such assets was to be included in the accumulated total for the guideline class. Thus, assets held in a stand-by or non-productive capacity, and assets not being used but not yet scrapped, could cause failure of the reserve ratio test. Consequently, a taxpayer who retained a moderate stock of fully depreciated property as stand-by or for use as peak load capacity, or on the chance of a future return of profitability, risked a lengthening of the tax life of the great bulk of his depreciable assets in active use.

Since growth was taken into account in arriving at the test ratio, the only way for taxpayers to avoid failing the reserve ratio test was to retire overage assets. Thus, the reserve ratio test in effect created a tax bias in favor of scrapping capital equipment that might still be useful for stand-by purposes, for peak production periods, for national emergencies, or for other emergency demands of various kinds. This effect would be clearly felt where a growing business weighed the discarding of relatively small amounts of overage equipment against the consequences of failing the reserve ratio test and suffering a lengthening of the depreciable life on an entire guideline class of property. Businesses do not readily destroy or dispose of useful resources, but they may be expected to do so when the benefits of retaining these resources are less than the tax benefits of retaining a shorter depreciable life on a very large amount of property.⁴² It is possible to keep the demand for new equipment at a high level to modernize American industry and stimulate technological advance without wasting currently or potentially useful assets.

Hindsight Nature of the Test

The most fundamental defect of the reserve ratio test, however, is that it looked solely backward. That is, it reflected only what the taxpayer has done in the past—in some cases the rather ancient past—and thus gave guidance for the future only to the extent that history repeats itself. The very nature of the reserve ratio test is inconsistent with the most salient reason given for

⁴² Defenders of the reserve ratio test point to the 20 percent leeway rule as ameliorating the stand-by problem, but the argument is unconvincing. The 20 percent tolerance had other functions, such as offsetting the effect of technical errors due to irregular growth and giving the taxpayer some flexibility in the timing of retirements and replacements. It is difficult therefore to expect it to handle the stand-by problem also.

adopting the guideline lives—that depreciation policies prior to 1962 were based on past replacement policies and, for that reason, had “inadequately reflected the fast-moving pace of economic and technological change.”⁴³ The 1962 Depreciation Guidelines were designed to “correct this fundamental flaw and . . . recognize that obsolescence is a continuing factor in business life which our tax administration must take fully into account.”⁴⁴ A reserve ratio test measures only the past practices of the particular taxpayer and does not take this factor into account.

The reserve ratio test could well signal a need for lengthening of assets' life when the exact opposite is required. A guideline class of assets, for example, office furniture and fixtures, might now primarily consist of computers and automated accounting systems while in prior years it was composed primarily of typewriters and adding machines. The fact that a particular taxpayer held his adding machines and typewriters for a period of time longer than their estimated useful life for tax purposes does not necessarily signal a longer class life today. Because of rapidly changing technologies in the computer field at the present time, the class might have a far shorter average life after giving due effect to a “reasonable allowance for obsolescence.”

Another instance where the reserve ratio test would be misleading is a situation in which a taxpayer, or perhaps a number of taxpayers in an industry, “mark time” in their retirement and replacement policy while awaiting the development to commercially feasible use of a new type of machine or a whole new process innovation which would outmode their old equipment, but would itself probably be subject to faster wearing out or obsolescence. The situation here would call for shorter lives for the new equipment, not longer lives dictated by the artificially delayed retirement of the older type of equipment.

While a “facts and circumstances” analysis, if administratively feasible, might prevent these results, the reserve ratio test itself would be inadequate in such cases. Furthermore, its false signals might tend to prejudice the negotiation of a correct forward-looking life by the taxpayer and the revenue agent.

Reserve Ratio Test Never a Practical Reality

From its inception the reserve ratio test exhibited a number of serious difficulties, both practical and conceptual. The problems arising from its application and its impact on taxpayers using the guideline lives were recognized to be so great that the 1965 transition rules were adopted to extend the 1962 moratorium so that the test would not begin to have practical effect for a number of additional years. As a practical matter, therefore, there generally has been little or no reserve ratio test in effect for the nine years since introduction of the guidelines in 1962, although the transitional allowance is phasing out so that the test would begin to have real potential effect for 1971 and later years.

⁴³ Statement of Secretary Dillon, July 11, 1962.

⁴⁴ *Id.*

Complexity of the Test

In the opinion of many observers, the complexity of the reserve ratio test in its two alternative forms and its related rules, options, transitions, phase-outs, and adjustments has made it virtually unworkable.⁴⁵

During August of 1962, following promulgation of Revenue Procedure 62-21, two or three senior revenue agents from each of the 60 district offices were brought to Washington for intensive training as instructors in the guideline procedures. They, in turn, conducted training sessions in each of their respective district offices for all of the resident revenue agents. Despite these efforts some 87 percent of the experienced revenue agents in the Service at the present time consider the reserve ratio test of the guideline procedures to be unworkable and impractical because of its complexity, its tolerances or limitations. Eighty-eight percent of experienced revenue agents favor abandoning the test. Thus, despite intensive training of revenue agents in the intricacies of the reserve ratio system, few agents are able to apply the test in all its complexity.⁴⁶

Seventy-five percent of the IRS conferees who handle disputed or unagreed depreciation issues beyond the revenue agent level have found that the reserve ratio test is not helpful in reducing controversies over useful life.⁴⁷ Furthermore, the complexity of the test suggests that its application is an unwarranted burden to taxpayers. The application of the reserve ratio test is not a unitary proposition for each taxpayer. Rather, it is a multiple procedure since it has to be repeated for each guideline class (a taxpayer would typically have several classes) with sub-computations for property under different depreciation methods. For many taxpayers both the tabular and the alternative guideline form would need to be explored year after year, with possible projections into the future, to get some evaluation of the taxpayer's probable tax depreciation status—an important consideration in financial planning and investment decisions.

Risk of Adjustments in Useful Life

The United States was unique in providing a reserve ratio test. No other country apparently has employed an objective rule of this type in its depreciation system. Comparison of guideline lives in the United States with tax lives provided in other

⁴⁵ See, e.g., *Hearings on the Proposed Regulations Under Section 1667 of the Internal Revenue Code of 1954 Relating to the Asset Depreciation Range System* before the U.S. Department of the Treasury, Internal Revenue Service, at 331 (1971) (testimony of Charles W. Stewart). ("[T]he reserve ratio test is unworkable, is so complex as to be beyond the comprehension of many corporate taxpayers, and not likely to lend itself to meaningful, equitable, and consistent administration.") [These hearings are hereinafter cited as *ADR Hearings*.] Others have suggested that the reserve ratio test is relatively easy to compute. *Id.* at 222a-23 (testimony of Martin David); *Id.* at 545-46 (testimony of J. D. Coughlan).

⁴⁶ The percentages cited above were derived from a survey of Internal Revenue Service revenue agent and engineer personnel conducted in May 1971. Over 3,500 Internal Revenue Service employees with over five years' experience responded to a questionnaire prepared by the National Office of the Internal Revenue Service. The survey was designed by experienced Internal Revenue Service officials to determine whether the administrative difficulties with the reserve ratio test system perceived by National Office personnel were consistent with the views of field personnel. This IRS survey has been made available to the public. The percentages in the text may be obtained from Part II, Questions 4 and 10. [This survey is hereinafter cited as *IRS Field Survey*.]

⁴⁷ *IRS Field Survey*, Part III, Q. 4.

countries therefore has been misleading to the extent it ignored the existence of the reserve ratio test in this country, which introduced a risk or contingency element in depreciation allowances not apparent from the guideline life structure by itself.

V. Reasons for Adoption of ADR System.

There are two major sets of considerations which led to the decision to adopt the ADR system—

(1) The necessity from the standpoint of administration of the internal revenue laws for a comprehensive and improved system for dealing with the allowance for depreciation and the integrally related problem of repair and maintenance expenditures; the long history of unsatisfactory controversy over Bulletin F; the fundamental defects of the reserve ratio test; the magnitude of the problem of extensive facts and circumstances disputes with a substantial number of taxpayers; the logic, practical importance, and greater equity of relying on industry average lives; the need to move towards neutralizing depreciation as a competitive factor; and the necessity of providing a depreciation accounting system which would produce regular, systematic data for use in establishing industry lives and repair allowances—all these factors dictated the adoption of the ADR system.

(2) The statutory requirement that depreciation deductions include a "reasonable allowance for obsolescence" required a recognition of changing circumstances, current and anticipated, which call for permitting taxpayers to select lives from a range which includes lives shorter than those permitted by existing guidelines. The ADR system recognizes current and potential obsolescence as a result of recently imposed environmental control requirements, an increasing level of foreign competition, and high rates of capital formation since 1962 which suggest rapid incorporation of technological improvements. These and other factors indicate that depreciation allowances should not be tied to the past history of the individual taxpayer—an unreliable guide to the period of future productivity of the taxpayer's stock of capital assets.

The Problem of Administration

Depreciation deductions are presently being taken in about 10 million tax returns. Because of manpower constraints, the Internal Revenue Service has only approximately 150 depreciation specialists devoted primarily to depreciation work. While revenue agents audit the simpler depreciation accounts of many taxpayers, they are not trained and generally cannot be trained to deal with complex depreciation accounting, the intricacies of which are growing in scope. Despite intensive training within the Internal Revenue Service, few revenue agents are able to apply the reserve ratio test in all its complexity. Nor are they generally qualified to make engineering judgments about the useful lives of individual assets or asset classes. More often than not, revenue agents have been forced to use industry

norms, or published guides such as Bulletin F, as a ceiling without regard to individual retirement practices.⁴⁸ The specialists qualified to do this work are able to consider depreciation issues in roughly 10,000 tax returns annually (one-tenth of 1 percent of returns with such issues), and these are primarily returns of larger corporations.⁴⁹

The institution of the guidelines in 1962 and the effective suspension of the reserve ratio test until the present time have resulted in taxpayers generally using the guideline class lives or shorter lives. When the guidelines were introduced, the reserve ratio test was suspended because it would have resulted in widespread disqualification for use of the guideline class lives and consequent inequities. When the test was about to take hold in 1965, it was effectively suspended again to prevent failures. Rather than seek ways to postpone further its effect, Treasury considers it sounder to acknowledge the basic and irreparable defects of the test and abolish it.

If the test were applied, all taxpayers who fail the test could be expected to assert that they are entitled to the guideline class lives on a facts and circumstances basis.⁵⁰ If this should occur among only 5 percent of taxpayers claiming depreciation, audits would be required in 500,000 cases if the tax laws are to be applied uniformly—an increase of 20 percent in the total number of audits performed in 1969 and far beyond the present capacity of the Service to accomplish effectively and equitably.

Taxpayers are not required to elect guidelines in their tax returns, as ADR would require, but may wait until audit to do so.⁵¹ Since a small percentage of taxpayers have formally

⁴⁸ See *IRS Field Survey*, Part I, Q. 10, which indicates that prior to the issuance of Revenue Procedure 62-21, 80 percent of IRS revenue agents accepted lives claimed by taxpayers as long as the lives claimed equaled Bulletin F lives without regard to individual retirement practices. During this same period, about 60 percent of field revenue agents indicated that they recognized a 10 percent or greater tolerance in the depreciable life claimed by the taxpayer before proposing adjustments (Part I, Q. 11), and almost half of the revenue agents permitted useful lives *after audit* shorter than that reflected by actual retirement practice.

⁴⁹ Essentially all of the depreciation issues in the National Office of the Internal Revenue Service are handled by the Appraisal Section of the Engineering and Valuation Branch with a present staff of 14 technical man-years. Approximately 30-50 percent of the Appraisal Section's time is presently devoted to depreciation case issues (four to seven man-years). Other activities deal mainly with valuation matters and investment credit issues.

Of the field engineering staff totaling 224 specialists, 87 are natural resource engineers whose time and efforts are devoted largely to depletion and valuation issues in the oil, timber, and mining industries with only relatively minor emphasis on the depreciation issue.

The remaining 137 engineers and appraisers devote their efforts primarily to depreciation, valuation, and repair issues in the manufacturing construction, transportation and public utilities industries.

Generally, this later group of engineers consider depreciation and repair issues in every case, but these are not generally the primary issues. The average workload of this group is 20-30 taxpayer cases per year and each case may involve two to three tax return years per taxpayer.

Therefore, it may be estimated that engineer specialists consider depreciation and repair issues in about 10,000 tax returns each year (mostly large corporations).

⁵⁰ The *IRS Field Survey* suggests that a significant number of taxpayers claiming depreciation during the period since 1962 have used "facts and circumstances" to justify the tax lives claimed rather than the reserve ratio test of the other rules of Rev. Proc. 62-21 (Part II, Q. 8).

⁵¹ *Depreciation Guidelines and Rules*, U.S. Treasury Department, Internal Revenue Service Publication No. 456, Revised Aug. 1964, Question 66, at 75.

The 1966 *Statistics of Income, Business Income Tax Returns*, U.S. Treasury Department, Internal Revenue Service, Publication 438 (6-69) reports approximately 9 million returns claiming depreciation deductions, of which roughly 7.4 million were proprietorships, partnerships and subchapter S corporations. Of this total, 62,000—or less than 1 percent—showed that they had elected to employ Revenue Procedure 62-21 (the depreciation guideline system). *Id.*, Table 2A at 24-25, Table 3.9 at 170, and Table 4.5 at 190. Since taxpayers are not required to elect Rev. Proc. 62-21 in their returns but are permitted to wait until audit to do so, this figure probably vastly understates the number of taxpayers who are relying

"elected" guidelines, a great number of taxpayers are apparently claiming lives even shorter than the guidelines on their returns. This circumstance makes even more apparent the administrative impossibility of evaluating depreciation deductions claimed by a large percentage of taxpayers on the basis of facts and circumstances.

Thus, continuation under Revenue Procedure 62-21 without a major change was not possible. Further, the guidelines made no provision for, but in fact exacerbated, the problem of expensing or capitalizing repair and maintenance expenditures. The shorter guideline lives gave rise to a greater number of disputes because revenue agents often asserted that particular repair expenditures should be capitalized because they would extend the life of the assets beyond the guideline life. Depreciation allowances and repair and maintenance expenditures are intertwined for any business taxpayer and require an integrated solution, as ADR provides.

Similarly, the issue of salvage value must be resolved in any comprehensive system for dealing with depreciation. If this is not done, the area of dispute will merely shift to the salvage issue. The ADR system requires that salvage be established when assets are first placed in service. Certain property which is eligible for ADR will also qualify under section 167(f) of the Internal Revenue Code which permits salvage value to be reduced by 10 percent of the basis of property. In no event may assets be depreciated below salvage value. However, since the determination of salvage value is at best an estimate, minimal adjustments to salvage value will not be made. ADR provides that the taxpayer's estimate will not be disturbed unless the proposed adjustment would change the estimate by more than 10 percent of the cost of the assets in the account. On the other hand, if the adjustment would exceed this limitation, the entire adjustment will be made. Thus, the rule is merely a constraint on audit adjustments; it is not an additional 10 percent expansion of the rules of section 167(f).

The Guideline system—for nine years while the reserve ratio test has been made largely ineffective—recognized the impossibility of administering the depreciation provisions on an individualized basis. The ADR system is realistic and forthright in recognizing this same impossibility. ADR gears the annual depreciation allowance and the repair allowance to industry average lives and experience. This avoids the inordinate complexities of the reserve ratio test, the competitive inequities between new and old businesses posed by the reserve ratio test, the artificial and unwise pressure to scrap stand-by and other usable but unused facilities, and the fundamental error of the test in looking at an individual's past practices to judge the

upon using the guideline lives. However, the majority of IRS experienced revenue agents indicated that most taxpayers do not use the depreciation guidelines, and as the size of the taxpayer decreases, the number of taxpayers using the guidelines decreases. *IRS Field Survey*, Part II, Q. 1 and 2. This feature of the Guideline system further complicates administration. Taxpayers will often claim depreciation deductions based on useful lives shorter than the guideline life intending to argue "facts and circumstances" with the knowledge that they may elect the guideline life upon audit. This would not be permitted under the ADR system; taxpayers would be required to elect the ADR system at the time of filing their income tax returns. Reg. § 1.167(a)-11(f)(1).

period of future utilization of the newly acquired stock of capital assets.

In holding that a "reasonable allowance" for depreciation (including a "reasonable allowance" for obsolescence) should be based on industry experience, not the individual taxpayer's past experience, ADR adopts a rational concept. Taxpayers in a particular industry, competing in free markets, will tend to move toward similar production processes, will tend to use similar equipment, and will tend to retire equipment on similar schedules. Over any given time period, however, the individual taxpayer is subject to events which are both nonrecurrent and unique to that taxpayer. In addition, individual experience is frequently weighted by results of negotiation with revenue agents. The Treasury survey in 1959-1960 of tax depreciation rates in use by large corporations for property acquired after 1953 discloses variances among taxpayers in the same industry. For example, the responses of two major companies who manufacture electronics equipment indicated that one company was basing its depreciation deductions on an average useful life of 6 years, while the other was claiming an average life of 11 years on its tax returns. Such differences in useful lives are far larger than could be accounted for by differences in asset mixes; over time, varied "settlements" in different IRS field offices, involving concessions on various issues, and the application of *ad hoc* standards, had produced a bewildering array of useful lives. An industry as a whole is much less sensitive to such events, and, consequently, industry experience is more reliable than individual experience.

Thus, ADR represents the Treasury Department's conclusion that a reasonable allowance for depreciation (including a reasonable allowance for obsolescence) need not necessarily be based on the taxpayer's individualized experience but may be based on industry-wide experience. The past experience of the particular taxpayer is not a better guide to the future period of productivity of assets newly being acquired than the experience in the taxpayer's industry as a whole. The taxpayer's own past experience may well have been affected by a variety of abnormalities—difficulties in obtaining financing, labor difficulties, a period of depression in the taxpayer's business, or other factors. ADR recognizes that neither the reserve ratio test nor any other objective rule is an adequate guide to depreciation deductions, and that resort to a myriad of individualized "facts and circumstances" is simply administratively unworkable, given the number of potential disputes that would arise.

The commitment to use industry experience makes appropriate a range of allowable lives which includes the experience, in general, of those taxpayers in the industry who have shorter replacement cycles. This will prevent competitive inequities, and reflects the likelihood that taxpayers will tend toward use of the most efficient production processes and thus the most efficient turnover of their capital assets. Allowance of shorter lives is also necessary in order to avoid having a large percentage of taxpayers continually seeking to establish that their own individualized prior experience, based on a mass of historical data from which they may make selections, justifies a shorter tax life.

The burden of additional controversies that would result is manifest. Accordingly, ADR permits use of any life 20 percent shorter to 20 percent longer than the guideline class lives.

The ADR system will largely end the bulk of disputes in the depreciation and repair and maintenance categories and will enable the Internal Revenue Service to use its limited audit personnel for more intensive audit of other issues, such as tax fraud, for which standardized treatment is not appropriate.

At the same time, the ADR system establishes a comprehensive system of depreciation accounting which permits the retrieval of annual, systematic, nation-wide data on asset acquisitions and retirements. Thus, the periods of actual use of assets, as well as equivalent data on repairs and maintenance expenditures, will be available for study. The key to this system is a requirement that closed-end vintage accounts be used so that asset acquisitions and retirements in a guideline class may be identified by years.

The ADR system also establishes a data analysis program in the Internal Revenue Service which will provide a basis for future changes in guideline classes, guideline lives, and repair allowances as dictated by actual industry experience; for the adoption of new guideline classes and lives; and for other monitoring of the effectiveness of the ADR system.

More explicitly, the ADR system requires detailed reporting by all taxpayers who elect to use it and establishes an Office of Industrial Economics in the Internal Revenue Service. This office is separate from offices directly concerned with taxpayer compliance. Taxpayers will be required to file schedules annually with their returns showing basis of assets, salvage value, and other data which will permit determination of retirements for each ADR class. The reporting requirements will not be burdensome to taxpayers; they call only for basic information essential in determining depreciation.

The functions of the new Office of Industrial Economics will include—

- (1) Collection of data, maintenance of information files, and regular publication of analyses. Data pertaining to industrial asset management practices will be derived from tax returns, other government sources of information, published materials in the private sector, and special surveys by the Office of Industrial Economics.

- (2) Receipt of petitions from taxpayers representatives seeking revisions in asset classifications or prescribed ranges; conduct of investigations needed to evaluate proposals to amend or revise asset classifications and ranges; and recommendations of changes that appear to be justified.

- (3) Maintenance of direct liaison with the Bureau of the Census and the Office of Business Economics within the Department of Commerce for the purpose of enlarging the economic data base relating to capital stocks, obsolescence rates, and capital consumption.

Recognition of Changes in Conditions

As stated by President Kennedy and Treasury Secretary Douglas Dillon in 1962, and as restated by President Nixon and Treasury Secretary David M. Kennedy in 1971, depreciation allowances must be periodically updated to reflect modern industrial practices. Despite the inadequacy of currently available data with regard to historical obsolescence and the impossibility of predicting future obsolescence with certainty, the Treasury Department is charged by the Internal Revenue Code with the responsibility for eliminating obsolescence in order to permit reasonable depreciation allowances. Precise measurement of the rate of economic and technological obsolescence is, of course, not possible.⁵² It appears, however, that technological changes and other events which have occurred since 1962 will have the effect of rendering machinery and equipment obsolete more rapidly; that is, the average period of economic useful life of assets is likely to continue to decline.

During the past half-dozen years, the United States has experienced a growing under-utilization of manufacturing capacity—even in times of full employment. This growth in excess capacity during periods of full employment suggests increasing obsolescence resulting from a high rate of investment which has enabled taxpayers to introduce new technology at rates faster than usual.

In previous periods of relatively full employment, such as 1950 to 1953 and 1965 to 1966, the ratio of manufacturing output to capacity was about 90 percent. Since 1968, however, there has been a dramatic increase in "excess" capacity as measured by business survey responses. The volume of excess capacity rose significantly during 1968-1969, years of full employment. In both years, U.S. businesses were producing an additional 4.5 percent of output a year while adding roughly 6.5 percent a year to capacity. When excess capacity is increasing at a time of full employment, increased obsolescence is suggested: new machines and equipment are producing at a greater rate and old machines are less utilized.

There is other evidence of technological change which suggests a decrease in the useful economic lives of assets and an

⁵² The lack of such information becomes apparent from a review of the methodology of the survey of depreciation practices which led to the 1962 depreciation revision. In establishing guideline lives in 1962, the Treasury Department relied primarily upon a survey of depreciation claimed on tax returns. Only in nine industry categories were engineering studies conducted and these studies proved inconclusive with respect to estimating historical obsolescence and were to a large part ignored in setting the present guideline lives. The determination of a single guideline life from such data necessitated a judgment based upon a variety of factors.

Unfortunately, when the guideline lives were set in 1962, no method for obtaining data with respect to actual retirements of assets by vintage was provided. The depreciation revision of 1962 did not specify any method of accounting for tax purposes which would produce such information. No limitation on the form of accounts was imposed; old assets were included in the system, and no requirement that taxpayers maintain records pertaining to acquisitions by year was included. Thus, no information with respect to the age of assets when retired from business use is currently available.

A new survey of taxpayers or collection of information from taxpayers to determine the useful lives currently being used for tax depreciation purposes would not be meaningful. Useful lives for each industry category will generally range from periods shorter than the guideline life to the guideline period. From about 1962 through 1970, the guideline lives have generally been accepted by the Internal Revenue Service without question and it is unrealistic to believe that depreciation lives longer than the guideline period have been used to any significant extent. Some information could be collected to indicate roughly the cur-

increasing rate of obsolescence.⁵³ The dramatic shift to automation in recent years represents a marked change in production technology. This trend toward automation suggests a shortening in the periods of economic usefulness for equipment—even for the first wave of automated equipment such as computers. Other specific illustrations of the effects of technological change have been presented in the:

—machine and tool industry⁵⁴

—mining industries⁵⁵

—railroad industry⁵⁶

—paper industry,⁵⁷ and

—public utilities.⁵⁸

Federal and state pollution control legislation and regulations enacted since 1962 will also require the replacement of significant amounts of equipment. Moreover, the trend toward even stricter environmental control standards is likely to produce additional legislation and regulations which will result in further obsolescence of plant and equipment.⁵⁹

In 1962, the Treasury Department recognized that allowing depreciation based upon the guideline lives would not be sufficient to place American producers on a comparable basis with foreign competitors with respect to the tax treatment of capital

rent "reserve ratios" and thereby provide some information as to the amount of fully depreciated assets still in use. But since old assets are currently kept in the same accounts as new assets and records pertaining to acquisition and retirement by vintage have not previously been required, such information would not be particularly meaningful in evaluating the adequacy of the present guideline lives. The ADR system provides for the first time for systematic periodic collection of information with respect to the age of business assets at the time of their retirement.

⁵³ See, e.g., *ADR Hearings* at 56-77 (testimony of Congressman John B. Anderson); and *Report of the President's Task Force on Business Taxation* at 11 (September 1970).

⁵⁴ *ADR Hearings* at 334 (testimony of Charles W. Stewart, discussing the impact of developments such as numerical control technology).

⁵⁵ *Id.* at 632 (testimony of John R. Greenlee, discussing the recent shifts to the use of pellet facilities).

⁵⁶ *Id.* at 561-63 (testimony of Frank E. Barnett, discussing the replacement of telegraph communications by dial-type telephone operations and the imminent replacement of microwave system by underground cable communications). See also, *id.* at 579 (testimony of Paul M. Zeis, discussing obsolescence in railroad rolling stock caused by special, equipment-tailored cars built for individual shippers).

⁵⁷ *Id.* at 759, 766-67 (statement of Thomas R. Long, discussing the trend toward large, single in-line processing units and the use of diffuser washers in the last 10 years as a control device in connection with the use of lasers to control knives and trimming).

⁵⁸ *Id.* at 647 (testimony of John C. Dunn); *Id.* at 665-67 (testimony of Gordon Corey, discussing the recent trend toward nuclear power); *Id.* at 498, 500 (testimony of James H. Maloon, discussing the development of liquified natural gas).

⁵⁹ See, e.g., *ADR Hearings* at 69-70 (testimony of Congressman John B. Anderson, discussing the general impact of national environmental policy to hasten the replacement of business assets); *Id.* at 117 (testimony of Clifford D. Siverd, discussing the effect of pollution control legislation on the chemical industry); *Id.* at 339 (testimony of Charles W. Stewart, discussing the impact of pollution control legislation on the types of furnaces used in the foundry business); *Id.* at 449 (testimony of Ward C. McCallister, discussing the effects of pollution control and federal safety legislation on capital requirements of the gas industry); *Id.* at 505-06 (testimony of H. W. Close, discussing the expenditures required as a result of pollution control legislation in the textile industry); *Id.* at 618 (testimony of Fred W. Peel, discussing the impact of pollution control and mine safety legislation on obsolescence in the mining industry); *Id.* at 657, 659, 664 (testimony of Gordon Corey, discussing the shortening of useful lives in the electrical industry due to pollution control legislation); *Id.* at 680, 683 (testimony of Herbert Cohn, discussing the impact of pollution control legislation in the electric industry); *Id.* at 760 (testimony of Thomas R. Long, discussing the equipment changes in the paper industry for environmental improvements).

investments. A substantial reduction in depreciation lives coupled with the investment tax credit was considered necessary to approach the goal at that time.⁶⁰

Today, there is evidence that foreign producers in many industries have more modern facilities than their U.S. counterparts,⁶¹ and that the force of international competition will necessarily result in an increasing rate of retirement of U.S. plant and equipment in favor of modernized facilities. This modernization is essential if American producers are to compete effectively with those of foreign nations. The United States has the lowest percentage of investment in productive facilities in relation to Gross National Product of any of the principal industrialized nations.⁶²

Depreciation allowances for machinery and equipment in the United States have been far less than the comparable allowances for machinery and equipment in other industrialized nations. This is well documented in the Report of the President's Task Force on Business Taxation, which unanimously concluded that this circumstance is a serious deterrent to the modernization of United States plant and equipment.⁶³ American industry is today faced with intense competition in many areas from modern, well-equipped foreign industrial plants. The ADR system is an essential step toward narrowing these competitive advantages enjoyed by foreign producers.⁶⁴

⁶⁰ Statement of Secretary Dillon, July 11, 1962. Secretary Dillon added:

Depreciation has been a major problem of U.S. tax policy for decades. As a deduction used in determining the taxable income of a business, it directly affects the rate of recovery of invested capital. For that reason, it plays a vital role in business investment decisions—a major factor in determining a nation's rate of economic growth. Faster economic growth is essential if we are to reduce unemployment and provide jobs for the millions of workers coming into the labor force. Equally important, the investment level is closely related to productivity, hence, plays an important part in determining the competitive position of U.S. producers in world markets. We must be competitive if we are to reduce our balance-of-payments deficit and stem the drain on our gold stocks. Depreciation rates are, therefore, important not only to the welfare of business, but to the welfare of every American citizen. The investment credit was terminated by the Tax Reform Act of 1969. See Internal Revenue Code of 1954, § 49, added by Pub. L. 91-172, § 703(a).

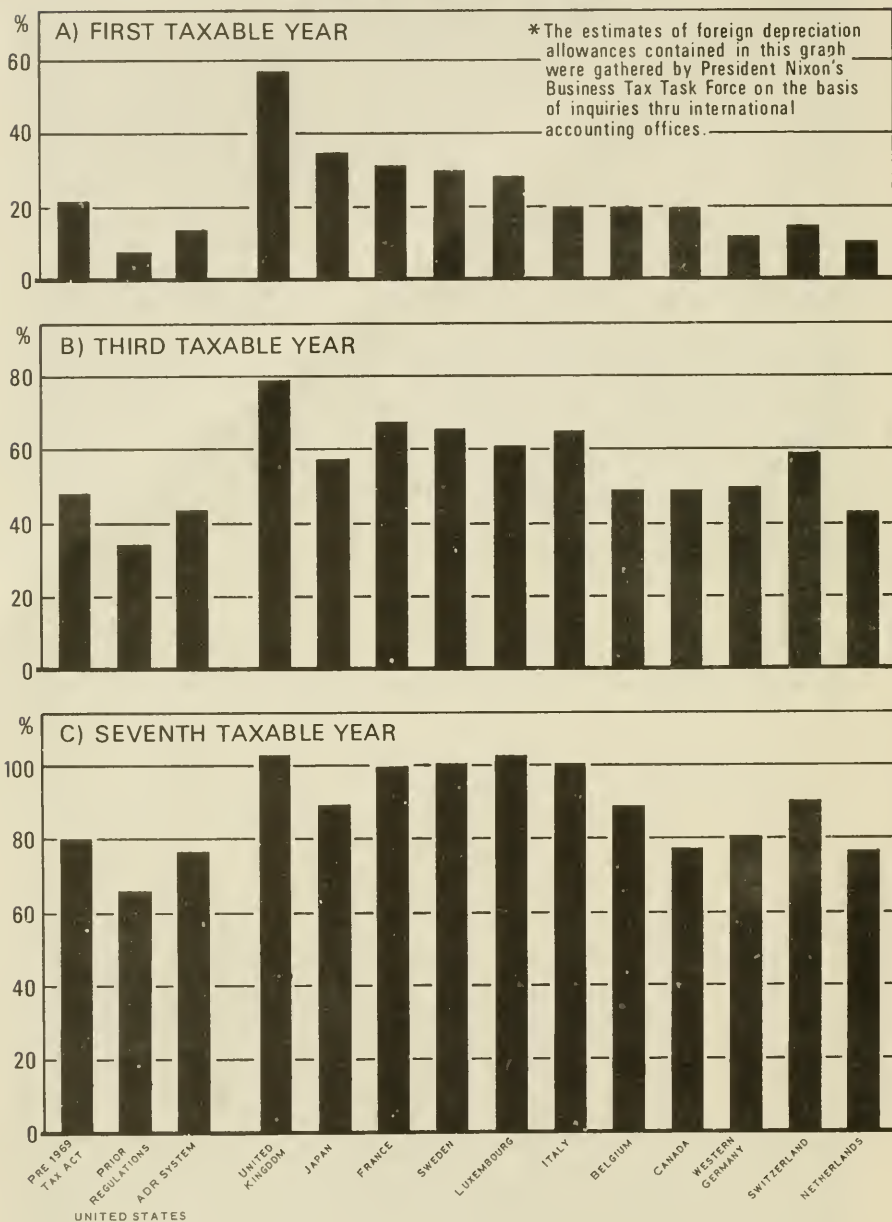
⁶¹ *Report of the President's Task Force on Business Taxation* at 7-11 (Sept. 1970); *ADR Hearings* at 59, 62-63 (testimony of Congressman John B. Anderson); *ADR Hearings* at 33 (testimony of Senator Charles H. Percy).

⁶² Organization for Economic Cooperation and Development, *The Growth of Output 1960-1980*, at 46 (Dec. 1970).

⁶³ *Report of the President's Task Force on Business Taxation* at 10-11.

⁶⁴ The following chart indicates a comparison of cost recovery allowances in the United States prior to the 1969 Tax Reform Act, under the regulations in effect prior to ADR and under the ADR system with comparable allowances in 11 foreign nations:

AGGREGATE COST RECOVERIES ALLOWABLE FOR TAX PURPOSES IN THE UNITED STATES* AND IN ELEVEN FOREIGN COUNTRIES ON MACHINERY AND EQUIPMENT



It is apparent, therefore, that there have been major changes since 1962 which require updating of the guideline lives. In the absence of precise data as to increasing obsolescence, but concluding on balance that there has been or is likely to be a significant increase, Treasury has adopted the ADR system to permit taxpayers to use any life within a range 20 percent above to 20 percent below the guideline lives. As previously stated, the industry-wide guideline lives and classes will be refined from time to time in the future as regular, systematic data on replacement practices becomes available under the ADR system.

VI. Legal Authority.

Section 167 of the Internal Revenue Code provides for a "reasonable allowance" for depreciation including a reasonable allowance for obsolescence. Section 167 also provides for issuance by the Secretary of the Treasury of regulations with respect to the manner of computing the "reasonable allowance." Section 7805(a) of the Internal Revenue Code expressly directs the Secretary of the Treasury to prescribe "all needful rules and regulations for the enforcement" of the Code. The ADR system embodies needful rules and regulations for the enforcement of the depreciation provisions.

Based on existing conditions previously described, the Treasury has exercised its discretion to determine that the concept of a "reasonable allowance" is sufficiently broad for assets acquired in 1971 and subsequent years to permit a 20 percent range of tolerance above and below the guidelines which have been used and accepted since 1962.⁶⁵ These guideline periods

⁶⁵ Buildings, generally, and assets which are predominantly used outside the United States are not eligible for the ADR system. Reg. § 1.167(a)-11(b)(2). The authority under §§ 167 and 7805 of the Internal Revenue Code is sufficiently general to permit the Treasury to exclude such assets from the ADR system. Moreover, § 167(d) of the Code specifically authorizes the Internal Revenue Service to enter into agreements with particular taxpayers with respect to depreciation of particular assets. See Reg. § 1.167(a)-11(g)(1).

Buildings are generally sold by taxpayers upon retirement. The rules for recapture of depreciation under section 1245 of the Code provide in general that gain on sales of personal property are taxed as ordinary income to the extent of all the depreciation taken on the property. Although opportunities for avoiding taxes as a result of accelerated depreciation for real estate were substantially reduced by the Tax Reform Act of 1969, the rules for recapture of depreciation as ordinary income upon the sale of buildings under section 1250 of the Code still permit a significant number of taxpayers who dispose of buildings prior to the expiration of their useful lives to depreciate below the anticipated sale value of the buildings and, upon sale, to treat a substantial portion of the excess of disposition proceeds over adjusted basis as capital gains. The added flexibility provided by the ADR system which permits taxpayers to select useful lives from within a range from 20 percent below to 20 percent above the guideline life would, in the case of buildings, increase opportunities for converting deductions from ordinary income into capital gains. In addition, such flexibility would increase the opportunity for generating "tax losses" in the early years of buildings' lives. See generally, H. Rept. No. 91-413, 91st Cong., 1st Sess. Pt. 1, 165-67 (1969); S. Rept. No. 91-552, 91st Cong., 1st Sess. 211-15 (1969).

Since buildings are generally sold upon retirement by the taxpayer, information made available through the ADR system as to retirements of assets to enable the Treasury to refine and update the estimations of useful lives will not be meaningful with respect to buildings. In addition, the administrative difficulties to be resolved by the ADR system are not present to the same extent in the case of buildings as with other business assets such as machinery and equipment.

Income from property which is predominantly used outside the United States is generally subject to income taxation in foreign countries. Foreign capital recovery systems are far more important in decisions to retire and invest in new assets, and thus in determining the general period such assets will be used, than the depreciation deductions allowed for federal income tax purposes. The administrative problems discussed *supra* at pp. 48-59, are not present to the same extent in the case of foreign property. Other factors, such as the current trend in the United States toward stricter environmental control standards, discussed *supra* at pp. 59-68, similarly do not apply with equal force to assets used in foreign countries. Industry experience in the United States is not so clearly a proper guide to the expected useful life of property used abroad where the mix of capital and labor as factors of production may differ because of differing wage rates and capital costs. The information

and classes will be adjusted from time to time as data are collected which indicate the need for refinement and change.

The ADR system is an appropriate exercise of the administrative responsibility delegated to the Treasury by the Congress.⁶⁶ The determination of a reasonable allowance for depreciation is by statute and long standing practice the administrative responsibility of the Treasury Department.⁶⁷ The history of the depreciation provisions clearly reflects an administrative rather than a legislative pattern.⁶⁸ In this regard, a

gathering function of the ADR system is not served to the same extent in the case of property used abroad.

Moreover, permitting the use of shortened depreciation lives for assets used abroad could produce adverse economic effects. For example, substantial increases in foreign investment might adversely affect the balance of payments. Additional investment abroad by United States companies or their foreign subsidiaries would not increase domestic employment to the same extent as a similar amount of domestic investment. For a discussion of the economic effects which are expected to result from adoption of the ADR system, see text at pp. 86-97, *infra*.

Although Treasury has concluded that these factors require the exclusion of buildings and property primarily used outside the United States from the ADR system, the reasons for rejecting the reserve ratio test as the sole method of determining useful lives apply with equal force to these assets. The reserve ratio test is a mechanical, backward looking mechanism which cannot take economic obsolescence into account. In addition, the reserve ratio test was designed primarily for multiple asset accounts composed of a wide variety of assets to measure the replacement practices of taxpayers; as a technical matter, its application to buildings often produces results which are not meaningful. See the discussion of the reserve ratio test at pp. 27-47, *supra*.

⁶⁶ Some written and oral comments received by the Treasury have suggested that promulgation of the ADR regulations would exceed the authority of the Treasury under the Internal Revenue Code. See, e.g., written comments on proposed ADR regulations submitted by Boris I. Bittker and Bernard Wolfman. See also, *ADR Hearings* at 264-310 (testimony of Bernard Wolfman); *Id.* at 398-414 (testimony of Frank L. Chamberlin, Jr.). It has also been suggested that even if promulgation of the ADR regulations is within the Treasury's authority under the Internal Revenue Code, it should not proceed administratively, but rather legislation should be requested. See, e.g., *ADR Hearings* at 138-39 (testimony of Congressman Henry S. Reuss). Others have suggested that the ADR regulations are a proper exercise of Treasury's authority. See, e.g., written comments on proposed ADR regulations submitted by Frederic W. Hickman, Covington & Burling, and Marmet & Webster; *ADR Hearings* at 310 (testimony of John L. Ellicott).

⁶⁷ A number of comments on the proposed ADR regulations suggested that the *Report of the President's Task Force on Business Taxation* indicated that a proposal such as the ADR system could not be adopted without legislation. On April 26, 1971, John H. Alexander, Chairman of the Task Force, submitted a written comment to the Treasury addressed to this point, stating:

It has come to my attention that in a number of submissions questioning the authority of the Treasury Department to promulgate regulations in the form proposed, reference is made to the recommendation of the President's Task Force on Business Taxation, of which I was Chairman, that the proposals of the Task Force relating to capital cost recovery of investment in machinery and equipment be implemented by legislation rather than by administrative action.

The specific recommendations of the Task Force were summarized on pages 3 and 4 of its Report

With respect to the implementation of such recommendations the Report contained the following statement at page 29:

'We recommend that the proposals discussed above be implemented by appropriate amendments of the Internal Revenue Code. The proposals in section A [simplification of capital cost recovery] for substituting in the case of machinery and equipment a system of cost recovery allowances for the present depreciation system involve some matters that have been dealt with under the present system by administrative procedures and regulations rather than by changes in the statute. For example, the reserve ratio test was formally introduced in Revenue Procedure 62-21, and, although our proposal for elimination of the test could be effectuated by administrative action, we strongly urge amendment of the statute to this end. Moreover, since the shift from depreciation to cost recovery unrelated to the useful life concept does require amendment of the present law, we urge that all the matters covered in the recommendations which are related to such a shift be incorporated in the statute.'

As appears from the foregoing, the Task Force took the position that it was the shift from depreciation to cost recovery unrelated to the useful life concept that required statutory amendment. The proposed regulations retain the useful life concept and the Task Force position as to the necessity for statutory action contains no suggestion that the Treasury Department lacks authority to modify the guideline lives or to eliminate the reserve ratio test or to adopt the other provisions of the regulations proposed. Indeed, as to the reserve ratio test, the Task Force statement quoted above clearly takes the position that such authority is in the Treasury Department.

⁶⁸ See text at pp. 9-27, *supra*.

report of the Staff of the Joint Committee on Internal Revenue Taxation submitted to the Congress in 1960 noted:

"Consistently, the statute concerning depreciation has been general, not requiring either any certain method of accounting or uniformity in annual deductions, so long as the taxpayer followed a reasonably consistent plan in recovering the original cost or other basis of his property, less salvage value, free of tax. Thus, depreciation has an administrative rather than a legislative history in U.S. tax law."⁶⁹

Prior to 1934, the application of the depreciation provisions was entirely determined by the Treasury Department. In 1934, Congress clearly recognized the authority of the Treasury Department to modify depreciation practices by administrative action having a major effect on business tax liabilities, in lieu of legislative action which would have increased depreciation periods by 25 percent. Treasury's administrative action had relative revenue consequences far greater than those attributable to the adoption of ADR.⁷⁰ Again in 1954, Congress explicitly recognized the broad discretion of the Treasury Department in establishing a reasonable allowance for depreciation. Congress at that time acknowledged the authority of the Treasury Department to accept any lives adopted by taxpayers unless there was a clear and convincing basis for a change, and Congress again withheld taking legislative action because of the existence of this authority.⁷¹

More specifically, in the course of adoption of the Internal Revenue Code of 1954, the Senate Finance Committee deleted a 10 percent proposed *statutory* range of tolerance in depreciation lives which has been provided in the House bill, approved the concept of this range, but recognized the greater need for administrative flexibility. Thus, Congress did not provide for any changes in the 1954 Code with respect to the method for determining the estimated useful life of business assets. It is important to recognize the acceptance of the Treasury's authority by the Congress and the preference for administrative resolutions of depreciation problems inherent in this Congressional action.

The 1962 action of the Treasury Department in adopting the Guidelines, an action approved by Congress, is a clear precedent for the adoption of ADR by administrative action.⁷² The adoption of Guidelines is such a precedent because it too represented a decision to determine lives by reference to industry experience. This identity exists, notwithstanding the announcement at that time of the reserve ratio test, in view of the fact that the test was suspended for three years and, as a practical

⁶⁹ Staff of the Joint Committee on Internal Revenue Taxation, *Notes on Background of Existing Provisions of the Federal Income and Employment Tax Laws* 13 (August 25, 1960).

⁷⁰ See text at p. 12, *supra*.

⁷¹ See text at pp. 16-19, *supra*.

⁷² The Guidelines received contemporaneous recognition by Congress in connection with the Revenue Act of 1962. See H. Rept. No. 1447, 87th Cong., 2d Sess. 8 (1962); S. Rept. No. 1881, 87th Cong., 2d Sess. 11 (1962).

matter, has not had any substantial effect for nine years because of its exceptions and transition rules and because of its general inapplicability for more than one full asset cycle.⁷³

The ADR system has been adopted by regulation, following publication of a notice of proposed rule making, receipt of written comments, and three days of public hearings; its adoption represents a far more formal step than the adoption of the Guidelines which was accomplished by publishing a revenue procedure in the Internal Revenue Bulletin.

The wide administrative discretion in the depreciation area is consistent with other instances where broad administrative discretion has been exercised under the Internal Revenue Code, such as in the allowance of standard mileage allowances and sales tax deductions by reference to the experience of taxpayers generally.⁷⁴

The very complexity of issues in the allowance of depreciation indicates the need for the wide discretion which Congress

⁷³ See text at 27-47, *supra*.

⁷⁴ In the administration of the Internal Revenue Code, recourse has been made in several situations to uniform tables or formulas to determine the proper amount of certain deductions. Common examples of these are the tables included in the instructions to individual income tax return Form 1040, which provide a basis for determining the amount of state or local sales tax and gasoline tax paid by an individual for purposes of the deduction allowed by § 164 of the Code.

Under § 162 of the Code, standard mileage rates for determining automobile expenses were prescribed in Rev. Proc. 70-25, 1970-2 C.B. 506. Similarly, Rev. Proc. 70-24, 1970-2 C.B. 505 prescribes the standard mileage rate for determining automobile expenses for purposes of the deductions allowed by § 170 and § 213 of the Code; and Rev. Proc. 71-2, 1971-1 I.R.B. 32 prescribes similar rules for purposes of the deduction allowed by § 217 of the Code.

In the situations described above, the Internal Revenue Service has prescribed rules for determining the proper amount of deductions in particular cases based on average experience applicable to all taxpayers. All of the statutes involved allow deductions only for amounts paid (or in some cases amounts paid or incurred) for particular expenses. The use by the Service of these means of approximating the proper deduction might be criticized on the ground that it departs from the theoretically exact amount paid or incurred by the taxpayer in a particular case. As an example, there may be very substantial differences in the operating expenses of different kinds of automobiles by different taxpayers, but Rev. Proc. 70-25 would allow a uniform rate per mile.

With respect to the breadth of the discretion of the Internal Revenue Service to prescribe uniform rules, § 167(a) is similar to § 166(e), which provides that in lieu of a deduction for specific debts that become wholly or partially worthless during the taxable year, there shall be allowed (in the discretion of the Secretary or his delegate) a deduction for a reasonable addition to a reserve for bad debts. The parenthetical language in § 166(e) refers to the Secretary or his delegate's discretion to refuse to allow a taxpayer to use the reserve method and not to the reasonableness of the deduction allowed. H. Rept. No. 350, 67th Cong., 1st Sess. at 11 (1921) stated:

Under the present law worthless debts are deductible in full or not at all, but [the bill] would authorize the commissioner to permit a deduction for debts recoverable only in part, or in his discretion to recognize a reserve for bad debts—a method of providing for bad debts much less subject to abuse than the method of writing off bad debts required by the present law.

Section 1.1666-4(b) (1) describes relevant factors for determining what constitutes a reasonable addition to a reserve for bad debts. Procedures for adopting a change to the reserve method of accounting for bad debts are described in Rev. Proc. 64-51, 1964-2 C.B. 1003, as modified by Rev. Rul. 65-92, 1965-1 C.B. 112, and as amplified by Rev. Proc. 70-15, 1970-1 C.B. 441.

Under the authority of § 166(e), the Internal Revenue Service provided by Rev. Rul. 68-630, 1968-2 C.B. 84, a uniform method for determining a reasonable allowance of deductions to commercial banks for additions to their reserve for bad debts. Rev. Rul. 68-630 has been superseded by the enactment of § 585 of the Code by the Tax Reform Act of 1969. The committee reports accompanying § 585 of the Code referred extensively to the administrative history of the allowance of bad debt reserve deductions to commercial banks. These reports evidenced an intent to reduce the allowance of deductions for bad debt reserves to commercial banks but raised no questions as to the validity of Rev. Rul. 68-630 or any prior rulings. H. Rept. No. 91-413, 91st Cong., 1st Sess. 120 (1969); and S. Rept. No. 91-552, 91st Cong., 1st Sess. 156 (1969).

See Reg. § 1.482-2(a) where the Treasury provided a 20 percent leeway in determining a reasonable interest rate on loans between affiliated taxpayers. These regulations provide that 5 percent interest will generally be considered a reasonable interest rate on such loans but that no adjustment will be made if interest is charged at the rate of at least 4 percent but not more than 6 percent. If a rate of less than 4 percent or more than 6 percent is charged, the rate will be set at 5 percent. See also, Reg. § 1.963-6(b) (4), which provides that "reasonable cause" for failure to receive a minimum distribution will exist if at least 80 percent of the amount of the required minimum distribution was paid.

has given to the Treasury Department in this area.⁷⁵ More detailed legislation prescribing depreciation allowances for particular industries seems neither desirable nor practical. One need only reflect upon the difficulties involved in rigidly setting by legislation the various allowances for percentage depletion to foresee the problems if Congress were to attempt to establish useful lives for depreciation for particular industries.⁷⁶

The reasons for abolishing the reserve ratio test, and for not seeking a substitute but looking instead to industry experience, have previously been documented.⁷⁷ The ADR regulations do not eliminate the "useful life" concept; they merely provide a method of determining "useful lives" by reference to guideline class lives established on the basis of industry experience. These guideline class lives will be updated from time to time based on data collected through the ADR system. ADR provides a range within which a taxpayer may select a useful life appropriate to him. The lives adopted by the taxpayer from the asset depre-

⁷⁵ Cf., S. 1532, 92d Cong., 1st Sess. (introduced in connection with introduction of S. Res. 98, 92d Cong., 1st Sess. that ADR not be made effective) which provides that the depreciation deductions under § 167(a) shall be "based upon the estimated useful life to the taxpayer" of depreciable property. This bill gives no guidance as to the method of "estimating" useful life. Without further guidance, the Treasury would have broad discretion as under present law to administer such a provision. If, for example, the Internal Revenue Service were to apply its pre-1934 and 1954-1962 administrative practices and generally accept the taxpayer's "estimate" of useful life, this would not be inconsistent with the ADR approach. ADR provides additional guidance to the taxpayer by setting forth a range of useful lives within which the taxpayer's estimate will not be disturbed. In addition, ADR provides a comprehensive system of depreciation accounting and an administrative mechanism to insure that the ADR range provides a "reasonable allowance." S. 1532 does not amend the operative language in § 167(a) which provides for a "reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)" of property.

⁷⁶ Section 613 of the Internal Revenue Code allows a deduction based upon a specified percentage of the gross income attributable to the production of certain minerals. Although this is relatively simple in concept, even a cursory examination of the statutory provisions indicates clearly the problems Congress has encountered in applying that concept. There are, for example, seven rate categories applicable to various groups of minerals. However, within these categories it has been necessary to make numerous exceptions because the same mineral may fall into different rate categories. The different rates are usually expressed in terms of the use to which the mineral is put, and generally have been enacted in order to rectify inequitable competitive situations. As a consequence of these considerations, it has been necessary for Congress to amend these provisions in almost every Congress since percentage depletion was extended to all minerals in 1951.

An extreme example of the difficulty Congress has experienced in this area may be found in the history of the percentage depletion rate allowed to clay. Minerals in this general category were first made eligible for depletion in 1942, when Congress permitted "ball and sagger clay" a rate of 15 percent. This was accomplished in order to put that mineral "on the same basis as coal, oil, fluorspar and other things which are given depletion allowances." The premise for this allowance was that the items manufactured from that mineral were useful to the war effort generally as well as in everyday life. In 1947 the list of clays eligible for depletion was expanded to include "china clay." In 1951 "brick and tile clay" was added but at a rate of only 5 percent, and "refractory clay" was added at the 15 percent rate.

The 1954 Code revised the percentage depletion rate structure generally in order to "clarify present law and to provide a grouping that is administratively more feasible and competitively more equitable." H. Rept. No. 1337, 83rd Cong., 2d Sess. 57. The changes also made depletion at the rate of 15 percent available to "all other minerals," thus including all the clays that had not previously been eligible for the deduction. In 1960 it was necessary to expand the provision describing brick and tile clay to include all clay "used or sold for use in the manufacture of building or paving brick, drainage and roofing tile, sewer pipes, flower pots and kindred products," in order to limit clays used for those purposes to the 5 percent rate rather than the 15 percent rate available for "all other minerals." In 1966, this was further revised to remove "clay used or sold for use in the manufacture of sewer pipe or brick" or as "sintered or burned lightweight aggregates" from the 5 percent category and place them in a new category of 7½ percent. At the same time, a rate of 23 percent was made available for clay "to the extent that alumina or aluminum compounds are extracted therefrom." The general reduction of depletion rates contained in the Reform Act of 1969 reduced the 23 percent clay to 22 percent, the 15 percent clay was reduced to 14 percent, while the 7½ and 5 percent rates were left unchanged.

Notwithstanding the frequency of these changes, the administrative burden involved in applying them has not been significantly simplified. The multitude of different clays all sought the highest available rate, and numerous rulings were necessary. In addition, a number of court decisions were necessary in order to finally decide some of the issues. See, for example, *Pacific Clay Products v. United States*, 332 F. 2d 156 (9th Cir. 1964); Rev. Rul. 66-24, 1966-1 C.B. 157; Rev. Rul. 55-180, 1955-1 C.B. 358.

⁷⁷ See text at pp. 27-59, *supra*.

ciation range period based on the guideline class life will constitute his "useful life" for all purposes of the Code.⁷⁸

The ADR system is a comprehensive system for dealing with all elements of the determination of depreciation and the integrally related problem of repair and maintenance expenditures.⁷⁹ The adoption of such a system is within the Treasury Department's delegated authority under sections 167, 446, 451, 461, and 7805 of the Internal Revenue Code of 1954.⁸⁰

⁷⁸ See Reg. § 1.167(a)-11(g)(1), which provides that an election to use the ADR system is a useful life agreement under § 167(d) to treat the ADR period selected as the useful life of the property for all purposes under the Internal Revenue Code, including §§ 46, 47, 48, 57, 163(d), 167(c), 167(f)(2), 179, 312(m), 514(a) and 4940(c). Thus, for example, since § 167(c) requires a useful life of at least three years and the ADR period selected is treated as useful life for purposes of § 167(c), the taxpayer may use the declining balance method or sum of the years-digits method of depreciation only if the ADR period selected is at least three years.

⁷⁹ The ADR system provides a comprehensive new treatment of the entire area of expenditures for the repair, maintenance, rehabilitation or improvement of property in Regs. § 1.167(a)-11(d)(2). Such expenditures are deductible under §§ 162 and 212, except to the extent they constitute capital expenditures under § 263. The expenses associated with preserving and keeping in efficient operating condition (repair and property maintenance) are deductible, and certain expenditures for permanent improvements or betterments made to increase the value (as distinguished from present value and upkeep) are capital expenditures, the same as the purchase of a new asset. In between these extremes fall many expenditures which are neither clearly deductible expenses nor capital improvements or betterments. Prior to ADR, resolution of this issue has been treated as a question of fact, involving subjective or negotiated judgments and arbitrary rules of thumb which vary from industry to industry, revenue agent to revenue agent and audit to audit. This process has traditionally led to numerous and extended controversies with taxpayers, which is necessarily the case when a factual judgment is made with respect to each of hundreds, or even thousands, of such expenditures in any particular audit. This is not productive of fair and uniform treatment of taxpayers and has been a major administrative problem for the Internal Revenue Service for many years.

The annual repair allowance under the ADR system provides a simplified procedure for resolution of repair vs. capital issues. Expenditures for permanent improvements and betterments are excluded from the repair allowance and are capitalized in accordance with § 263. Regs. § 1.167(a)-11(d)(2). There remain only the clearly deductible repairs, plus those whose status is ambiguous—those which are neither clearly deductible nor clearly capital. Under ADR, these are deductible to the extent of a specified percentage repair allowance for each guideline class with the excess capitalized. Application of an audit rule of thumb of this type on a uniform basis to all taxpayers under ADR—as contrasted with the traditional applications of varied and inconsistent comparable audit tools to individual taxpayers—is a legal exercise of the Treasury's administrative authority under § 7805 to provide all needed rules and regulations for the enforcement of §§ 162, 212 and 263 and other provisions of the Internal Revenue Code.

The ADR repair allowance is clearly distinguished from the issue in *F.H.E. Oil Co. v. Commissioner*, 147 F.2d 1002 (5th Cir. 1945) in which the Treasury's regulations were proposed to be amended to permit the deduction of an amount which was clearly a capital expenditure. In that situation there was no factual issue of whether the expenditure was capital, and the proposed amendment to the regulations was not an exercise of statutory responsibility to provide a mechanism for resolving a factual issue. Moreover, the ADR repair allowances have been established based on Treasury's evaluation of statistical and other data reflecting industry experience with respect to such expenditures for asset guideline classes.

A comparable legal situation exists with respect to the treatment of salvage value adjustments in Treasury Regs. § 1.167(a)-11(d)(1). The amount of depreciation which may be deducted for an asset is limited to its cost minus its salvage value. Salvage value is a matter of estimation, involving a present projection of the value of the asset many years in the future. As in the case of estimations of useful life in the future there is no one amount which is necessarily the correct estimate. There is a range of tolerance within which any estimate will be reasonable. A "reasonable" salvage value is all that has ever been required. The ADR system provides a means for resolving these factual determinations and avoiding administrative problems associated with extended controversies with taxpayers over minimal adjustments in salvage value. The taxpayer's estimate will be accepted as reasonable if it is within a range of the salvage value estimated by the Internal Revenue Service. This range is equal to 10 percent of the cost of the assets in the vintage account. The ADR system does not disregard a percentage of salvage value as is done by statute under § 167(f). The 10 percent adjustment limitation relates only to the resolution of the factual question whether the salvage estimated by the taxpayer is reasonable. If not, the salvage will be adjusted, taking into account the full amount of the adjustment except for the portion expressly excluded under § 167(f).

An important aspect of the ADR system—insofar as related to useful life, repairs vs. capital and salvage value—is that all three are interrelated issues involving the resolution of factual questions. Because of their nature, all three must be resolved—whether by a revenue agent in a particular audit or by regulation—by the use of guidelines.

⁸⁰ The Supreme Court decisions in *Massey Motors, Inc. v. U.S.*, 364 U.S. 92 (1960) and *Hertz Corporation v. U.S.*, 364 U.S. 122 (1960), do not require a different result. These cases hold that portions of the regulations dealing with useful life were valid. These regulations provide as follows:

§ 1.167(a)-1. Depreciation in general.

(a) *Reasonable allowance.* . . . The allowance is that amount which should be set aside for the taxable year in accordance with a reasonably consistent plan (not

VII. Economic Effects and Revenue Considerations.

Among its other effects, the ADR system will reduce the cost of capital or, equivalently, improve the after tax rate of return from investing. The ADR system is calculated to result in approximately a 4.4 percent reduction in capital cost for eligible assets. Improved after tax profit prospects will result in investments in productive machinery and equipment which would have been rejected in the absence of the ADR system. ADR will also increase liquidity and increase the certainty of business tax liabilities—effects which will also encourage investment.

Liberalized depreciation is a well-recognized means of providing a more favorable tax climate for private investment in production facilities. The 1962 Guidelines were adopted in part: to stimulate economic recovery (unemployment was about 6½ percent in 1961 when liberalized depreciation was first considered), to increase the competitiveness of U.S. goods in the world markets, and to promote long run economic growth. Liberalized depreciation has been widely used in the postwar period by other industrialized nations with substantially beneficial effects on investment and economic growth. As the President's Task Force on Business Taxation pointed out, our own country's experience during the recent past following the adoption of depreciation guidelines and the investment credit suggests that such incentives significantly encourage the development and modernization of the productive capacity of a nation. The experience of most European countries which have used liberalized depreciation as an investment stimulus throughout the post-World War II period also supports this view.⁸¹

Treasury expects, therefore, that the ADR system will provide a stimulus to modernization and expansion of productive facilities in the United States. This in turn will increase employment and encourage a higher rate of economic activity. ADR will result in greater productivity, thus providing a basis for higher wage levels for U.S. workers in the future, reducing

necessarily at a uniform rate), so that the aggregate of the amounts set aside, plus the salvage value, will, at the end of the estimated useful life of the depreciable property, equal the cost or other basis of the property as provided in section 167(g) and § 1.167(g)-1. . . .

(b) *Useful life.* For the purpose of section 167 the estimated useful life of an asset is not necessarily the useful life inherent in the asset but is the period over which the asset may reasonably be expected to be useful to the taxpayer in his trade or business or in the production of his income.

The substance of clause (a) has been in the regulations since 1919, and clause (b) was added to the regulations in 1956.

Massey involved taxable years to which the Internal Revenue Code of 1939 was applicable and considered whether the taxpayer could estimate a theoretical salvage value at the end of the physical lives of cars used in its trade or business and calculate depreciation on that basis or was required to refer to its own experience in determining probable salvage value and thereby the appropriate allowance for depreciation. The Supreme Court sustained the Government's argument that salvage value must be determined as of the end of the useful life to the taxpayer in his trade or business.

The decision of the Supreme Court in *Hertz* involved taxable years to which the Internal Revenue Code of 1954 was applicable and considered whether the definition of "useful life" contained in section 1.167(a)-1(b) was valid insofar as it affected the taxpayer's eligibility to elect an accelerated method of depreciation under section 167(b). The Supreme Court sustained the validity of the regulatory definition. The Court also held that property may not be depreciated below a reasonable salvage value even though a declining balance method is used.

Neither of these cases held that the regulations in force at that time constituted the only possible definition of useful life; in neither *Massey* nor *Hertz* was there any determination that it was inappropriate to determine "useful lives" on the basis of industry-wide experience. The holdings of *Massey* and *Hertz* are specifically preserved in the ADR regulations. See Reg. §§ 1.167(a)-11(d)(1) and (c)(1)(i)(a).

⁸¹ Report of the President's Task Force on Business Taxation at 10 (Sept. 1970).

inflationary pressures with consequent benefits to consumers, and making U.S. industry generally more competitive in world markets.

These general effects may be evaluated with reference to the revenue loss from adoption of ADR and the "feedback" effects on the economy. Without giving effect to any such feedback, the ADR system is estimated to result in a revenue loss of \$2.8 billion for the calendar year 1971; the average revenue loss before feedback over the 10 year period ending December 31, 1980, will be \$3.9 billion per year. The estimated 1971 pre-feedback loss constitutes 5.8 percent of business tax liabilities, which may be compared to a revenue increase of 11 percent estimated for the 1934 administrative action of the Treasury Department and a revenue loss of 5.5 percent estimated for the 1962 Guidelines. In this latter connection, it should be noted that prior to the 1962 depreciation revision, President Kennedy indicated that revenue considerations in the context of then-present budget considerations were the only limit on liberalizing depreciation allowances.⁸²

These estimated revenue losses represent the amounts which would result from adoption of the ADR system if the basic levels of investment and income remain unchanged. However, as previously indicated, there will be favorable changes in investment and income from adoption of ADR, and the net revenue impact must be evaluated in the light of these feedback effects. Such effects were recognized by President Kennedy when the 1962 action was taken.⁸³ President Nixon has anticipated similar benefits to the economy from the adoption of ADR.⁸⁴

Estimates of the feedback effect as a result of adoption of the ADR system vary among economists. Some experts hold the view that there will be no revenue feedback from the ADR system.⁸⁵ One economist has calculated that the revenue feedback will be sufficient to ensure that the net result of the ADR system will be a net revenue *gain* by 1973, growing to about \$2 billion in 1974.⁸⁶

⁸² In this regard President Kennedy stated:

I recognize that many of you would like, as I would, to have far more rapid depreciation schedules. I can assure you that we are limited only by the fact, which you must recognize, that these depreciation changes will, in their early years, mean a loss of governmental revenues. If we wish to bring our budget as closely as possible to balance as far as the economy permits, we do not feel able to relinquish at this time these sources of revenue in toto. But we should look ahead to the maximum extent possible, as we have already done in textiles, and as we are now examining in steel, and we are quite conscious of the competitive advantages which rapid depreciation gives to the Western European manufacturers. We are looking ahead now to make these depreciation schedules more realistic.

Address by the President before the United States Chamber of Commerce, April 30, 1962
Public Papers of the President (1962) 345, 347.

⁸³ See text at p. 22, *supra*.

⁸⁴ When he announced the ADR proposal, President Nixon stated:

I want to emphasize that these short-run revenue reductions announced today are not so large as to prevent us from maintaining balance, now and in fiscal year 1972, between budget spending and the revenues that would be generated in a full employment economy. Most importantly, they can be expected to have a substantial "feedback" effect. Past experience demonstrates that depreciation liberalization will stimulate the pace of spending on new plant and equipment, which has been levelling off, and thus create jobs. As a result, Federal tax collections in the long run will increase. The estimates of revenue loss may, therefore, be regarded as maximum estimates.

Statement of the President, January 11, 1971, at 1-2.

⁸⁵ See, e.g., *ADR Hearings* at 158-59, 161 (testimony of Robert Eisner).

⁸⁶ *ADR Hearings* at 173 (testimony of Dale W. Jorgenson).

The response of investment levels to improved after tax rates of return is certainly not clear; estimates in economic literature vary from an estimate that the 4.4 percent reduction in capital cost will in the long run increase investment by 4.4 percent, to an estimate that the increase will be only 1 percent.

Treasury studies suggest that as a result of its effects on capital cost alone, ADR will increase investment at least 2.5 percent above the amount that otherwise would be invested in qualified property.

Thus, in the several years immediately after adoption of ADR, the Treasury estimate suggests that business would want a capital stock of qualified property which is 2.5 percent higher. This means that not only would new investment be higher by this amount, but also there would be some catching up because in the light of the current capital cost, the existing stock of equipment should be too low. A rough estimate of this catching up process would suggest that over the first several years after adoption of ADR new investment will be higher by about 5 percent of what otherwise would have been invested in qualified property.

Without adoption of ADR, investment in qualified property would be about \$80 billion a year. The analysis above suggests an increase in investment of about \$4 billion a year. This will be lower in the first year and higher in the second, third, and following years. "Multiplier" effects representing the increased income and spending generated by an initial impulse of expenditure might well build the aggregate levels of response to higher figures.

As previously indicated, the foregoing analysis is entirely in terms of increased investment levels resulting from an increased after tax rate of return. There are related considerations, however, which also have a bearing on investment levels and which will be affected by ADR. ADR serves to increase cash flow or liquidity, providing an internal source of capital funds and thereby reducing dependence on borrowing. To the extent that investment is deterred by reluctance to borrow, or by capital market imperfections, ADR will raise investment levels. The availability of shorter tax lives, the increased business certainty that specified tax lives once adopted may be used without reversal, and the assurances of stability in the determination of tax liabilities from other features of the ADR system—the treatment of repair and maintenance expenditures, salvage value, and retirements—all contribute in some measure to the stimulative effect in the investment equation.

ADR is being adopted at an appropriate time; sufficient supply resources exist and an accommodating monetary policy is in effect. Thus, the increased investment will be converted to increased GNP, increased employment, and higher tax revenues. The result of ADR in hastening the return to full employment will be that in this process, annual tax liabilities will rise because of the higher GNP (multiplier effects). While it is true that almost any tax cut undertaken in a period of unemployment will generate some feedback effects, the ADR change is unique in that: (1) it will generate immediate demands for particular

resources—those engaged in producing capital goods—that would otherwise not be utilized; and (2) it will provide additional machinery and equipment which will increase productivity and efficiency.

Questions have been raised whether the adoption of ADR at this time will have any effect in view of the fact that we are going through an economic readjustment and excess capacity already exists. It has been suggested that businesses have all the capital they need for the present condition of markets. This criticism does not stand up under analysis.

Much of the suggested excess capacity represents over-age, obsolete facilities in the United States. This kind of "excess" capacity does not impede new investment if funds are available and if the after tax rate of return on such investment is improved. More importantly, surveys of business plans for investment in plant and equipment, taken before the ADR announcement, indicated that businessmen already considered about \$83 billion of investment to afford sufficiently good profit prospects to be worth undertaking. Clearly, there is implicit in this figure a number of projects which, prior to the adoption of ADR, were just below the margin of profitability. The increased rate of return implicit in the introduction of ADR will convert nearly profitable projects into profitable ones. It is the exploitation of these previously near-profitable projects which most clearly serves to raise investment expenditures.

If depreciation is to be liberalized, the best time to do it is in a period of some economic slack, when resources are available to meet the increased investment demand. Increased investment in modern plant and equipment will, once new facilities are in operation, increase productivity and reduce inflationary pressures. This time is especially propitious for the introduction of the ADR system. Unemployment is still substantial; inflationary pressure has been reduced; and any additional spending generated by the ADR system will speed economic growth.

Conditions in the capital goods industries are especially favorable. Spending for capital goods has slowed greatly, and the industry is characterized by unemployed resources. The machine tool industry is operating at particularly low rates. Thus, as business firms proceed to increase their capital stock, there will be no need to bid resources away from other uses; the capital goods industry will be able to supply the additional capital required by reemploying currently unused resources. As a consequence, employment in the capital goods industry is likely to be affected directly, quickly, and favorably.

Moreover, the rate at which new inventive ideas and technological advances are put in use depends in part on the stimuli of producers' demands for better, more efficient machinery. ADR, in stimulating investment, will speed the process by which the newest technology is incorporated into productive facilities. This means both a more modern and efficient capital stock and a healthier state of the "technology" industries, which thrive on vigorous, competitive capital goods markets.

In the long run, the increased stock of business capital associated with more equipment investment increases productivity

and GNP. The essence of the long run adjustment is "capital deepening investment"—an increase in the ratio of capital to output—which is the key to higher productivity, greater output per capita, and higher living standards.

The modern economy depends heavily on an expansion of its productive facilities for continuing healthy economic growth. To achieve real growth as distinguished from mere replacement of plant and equipment, expenditures on new plant and equipment must exceed the erosion, attrition, and obsolescence of the existing stock of productive facilities. It is only the net excess of the gross investment over the wear and tear and deterioration that constitutes net accretion to our business capital stock. ADR will serve to increase the extent of this net accretion.

With a growing population and heavier demands on our output to deal with the variety of problems related to the environment, housing, health, and the quality of our national life in general, we need continuing growth in our productive capacity.⁸⁷ Liberalized depreciation to encourage and stimulate investment is clearly consistent with present economic goals.⁸⁸ Removal of present unrealistic restraints on capital investment, and investment of a greater portion of our current resources in productive capacity for the future, will be of long run and lasting benefit to the United States.

Conclusion

The Treasury Department expects the promulgation of the ADR system to produce the following results:

- the uncertainty and complexity of the application of the depreciation provisions of the Internal Revenue Code will be significantly reduced and substantial administrative benefits will be achieved;
- the establishment of the Office of Industrial Economics in conjunction with the ADR system will, for the first time, permit useful lives for each asset class to be as current and as accurate a reflection of a "reasonable allowance" as possible, based upon a broad spectrum of up-to-date information reflecting both the trend of past experience and what may be anticipated for the short run future;

⁸⁷ See statement of Paul W. McCracken, Chairman of the President's Council of Economic Advisers, January 11, 1971, where Mr. McCracken stated:

It seems to me . . . the major significance of these moves is to be found in the fact that in the short run they will increase both the means and the incentives for capital expenditures of businesses. They will mean roughly a percentage point increase in rate of return although that will vary, depending on the situation, and of course the cash flow itself will thus be augmented.

I think for the longer run, however, this change may have even greater significance. What these are going to do is to make for a more competitive and resilient and productive economy. They will increase the equilibrium amount of investment which it is appropriate for any company to make, thereby enhancing the productivity of labor and other productive resources. This is going to be very important in the period ahead, both because of the heavy demands on our productive facilities—they are going to be coming with new uses such as environment and so forth—but also because of the importance of our maintaining and strengthening our competitive position in the international markets.

⁸⁸ See statement of the President, January 11, 1971.

- increased investment resulting from ADR will produce economic growth which will increase our Gross National Product and reduce unemployment;
- additional investment in more modern productive equipment stimulated by ADR will increase productivity and dampen inflation; and
- the competitive position of American producers in world markets will be greatly strengthened.

To: All Regional Commissioners and District Directors
From: Director, Audit Division
National Office CP:A
Subject: Survey of Audit Depreciation Practices

The Commissioner has urgent need for information about field audit practices in handling depreciation issues both prior to and subsequent to January 1, 1962.

We are sending you a quantity of this memorandum with a questionnaire attached on the subject of depreciation practices. The questions have been designed to minimize preparation time and do not require research or the compilation from records. Rather, the survey is designed to draw on the actual experience of revenue agents, engineers and conferees regarding the actual practices involved in adjudging useful lives for Federal Tax depreciation purposes.

Parts I and II of this survey form should be filled out by as many revenue agent and engineer personnel as possible who have a minimum of five years with the Internal Revenue Service in these positions. Part III should be filled out by Audit Conferees. Employees are not asked to sign the questionnaires. But it is essential for field officials at all levels to see that steps are taken to have the appropriate employees prepare the questionnaires so that they will be returned within the time prescribed below.

Please note item 11 Part I of the questionnaire asks for information regarding tolerances for adjusting useful lives. If your district has issued any instructions on this point, please send us a copy with the completed questionnaires.

This is a high priority project established at the Commissioner's request and your replies are requested to be returned to Director, Audit Division, Attention: CP:A:C no later than 10 days from the date of your receipt of this memorandum. Because of the urgent need for the information, district audit divisions should send the completed questionnaires directly to this office.

This report is exempt under IRM 1(20)16.35(1)(e).

/s/ S. B. Wolfe
S. B. Wolfe
Internal Revenue Service

Attachment

DEPRECIATION SURVEY

ALL PERSONNEL
GRAND TOTAL
6-17-71

Revenue Agents & Engineers

I For tax years ending before 1/1/62

For Machinery and Equipment Only

- (1) In your experience did taxpayers claim lives for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...2656; same as...999; longer than...100.

- (2) Was the answer given above generally true and consistent or was taxpayer practice erratic? Check one.

General consistent...2865; erratic...848.

- (3) In your experience did you, during this period (before 1/1/62) more often accept lives claimed for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...1395; same as...2102; longer than...191.

- (4) Was the answer given in question 3 generally consistent or erratic in practice? Check one.

Generally consistent...3258; erratic...515.

- (5) In your experience did taxpayers generally claim lives for their equipment on the basis of actual retention or retirement practices; over a longer than; shorten than, retirement practice period? Check one.

Shorter than...2801; actual...719; longer than...184.

- (6) In your experience in adjudging taxpayers claimed lives for depreciable equipment, do you feel that the lives you finally accepted and agreed upon with the taxpayer were shorter than, the same as, or longer than lives based on actual taxpayer retirement practices? Check one.

Shorter than...1666; same as...1808; longer than...233.

- (7) What proportion of your depreciation case issues for machinery and equipment during this period was agreed to by you and the taxpayer before Conference level or Appellate? Check one.

Less than 50%...209; 50-75%...824; more than 75%...2627.

(8) What proportion of depreciation case issues unagreed at your level was sustained in full at high level (i.e. Conference, Appellate or Court?) Check one.

Less than 25%...1144; 25%-75%...1351; more than 75%...1209.

(9) What proportion of unagreed depreciation issue cases was later adjusted by Conference, Appellate or Courts to *shorter* lives than you had recommended for depreciable machinery and equipment? Check one.

Less than 25%...2105; 25%-75%...971; more than 75%...554.

(10) During this period (prior to 1/1/62) in your consideration of lives claimed for depreciation did you accept lives claimed if they equaled or exceeded Bulletin "F" without regard to the taxpayer's actual retirement practices? Check one.

Yes...2973; No...709.

(11) Did you use a percentage tolerance in considering whether or not the taxpayers lives claimed for depreciation were acceptable? Check one.

No tolerance...1445; within 10%...1703; greater than 10%...547.

(12) Considering your answers to the foregoing questions, do you feel that you and the IRS, in the period prior to 1962, did establish depreciable lives for taxpayer's machinery and equipment that were less than, the same as, or more than the lives reflected by the taxpayer's actual retirement and replacement practice? Check one.

Less than...1704; same as...1519; more than...339.

II For tax years ending after 1/1/62

For Machinery and Equipment Only

(1) In your experience since 1962 for your taxpayer cases involving depreciation of machinery and equipment; have most, some or few of these taxpayers adopted the guideline procedures of Revenue Procedure 62-21? Check one.

Few...2088; some...938; most...872.

(2) Supply the same information for smaller taxpayers (less than \$1,000,000 in assets) as to the proportion using guideline procedures of Rev. Proc. 62-21. Check one.

Few...2576; some...841; most...476.

- (3) In your cases where taxpayers used guideline depreciation did most of them adopt depreciation guidelines before or during the examination? Check one.

Before...3466; during...404.

- (4) In your opinion is the reserve ratio test workable and practical or unworkable and impractical in its present form? Check one.

Workable and practical...493; unworkable and impractical...3297.

- (5) If you judged the test unworkable and impractical check the item below which most nearly fits the basis for your conclusion.

Complexity of test...1219; lack of taxpayer understanding of test...507; numerous tolerances and adjustment limits invalidate effectiveness of test...1356; assumptions of the test do not fit actual situations...171; other...59.

- (6) How often did you test the reserve for depreciation by using the reserve ratio test? Check one.

Never...1493; 1-10 cases...2104; 10-20 cases...136; 20 or more cases...46.

- (7) In your experience how often did taxpayer fail the reserve ratio test? Check one.

Never...2287; 1-10 cases...1151; 10-20 cases...68; 20 or more cases...21.

- (8) What proportion of taxpayers claiming depreciation during guideline years used a test of facts and circumstances to justify the lives claimed rather than the reserve ratio test or other rules of the procedure? Check one.

0-25%...1695; 25%-75%...832; over 75%...1231.

- (9) In your opinion, are most, some or few taxpayers receiving more favorable depreciation benefits under the depreciation guidelines of Rev. Proc. 62-21 than they might otherwise be able to justify? Check one.

Most...1573; some...1333; few...904.

- (10) Do you favor abandonment of the reserve ratio test? Check one.

Yes...3349; no...477.

- (11) My answers to these questions are based on the following degree of emphasis or experience with the issue of useful life for depreciation in my cases. Check one.

Frequent____2028; infrequent____1854.

- (12) My position in the Service is: Check one.

Revenue agent____3715; engineer____116.

- (13) My years of IRS experience as an agent or engineer are: Check one.

5-10 yrs.____1364; 10-15 yrs.____734; 15-20 yrs.____781; over 20 yrs.____1011.

III Conferees at District Conference Staff For Machinery and Equipment Only

- (1) For pre-1962 years and the depreciation cases coming before you at Conference level, did you sustain the revenue agent's recommendation as to useful life in most, some or few of the cases considered? Check one.

Most____44; some____87; few____26.

- (2) As a matter of general practice for pre-1962 years do you feel the conclusions reached at conference level by you on useful life questions were accurately reflective of taxpayers actual retirement practices, or more, or less than actual retirement practice? Check one.

More than____10; same as____91; less than____55.

- (3) If your answer above indicates that you have disposed of cases at Conference level at useful lives of less than actual retirement practices which, if any, of the following factors most nearly reflects your reasoning for that conclusion? Check one or more.

Technological advances____6; economic obsolescence____32; relative unimportance of useful life in the depreciation equation (question of timing)____22; other____10.

- (4) In your experience, has the reserve ratio test of Rev. Proc. 6221 been helpful in reducing controversies over useful life? Check one.

Yes____38; no____111.

DEPRECIATION SURVEY

REVENUE AGENTS
GRAND TOTAL
6-17-71

Revenue Agents & Engineers

I For tax years ending before 1/1/62 For Machinery and Equipment Only

- (1) In your experience did taxpayers claim lives for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...2566; same as...985; longer than...97.

- (2) Was the answer given above generally true and consistent or was taxpayer practice erratic? Check one.

Generally consistent...2782; erratic...825.

- (3) In your experience did you, during this period (before 1/1/62) more often accept lives claimed for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...1359; same as...2044; longer than...180.

- (4) Was the answer given in question 3 generally consistent or erratic in practice? Check one.

Generally consistent...3168; erratic...497.

- (5) In your experience did taxpayers generally claim lives for their equipment on the basis of actual retention or retirement practices; over a longer than; shorter than, retirement practice period? Check one.

Shorter than...2712; actual...705; longer than...182.

- (6) In your experience in adjudging taxpayers claimed lives for depreciable equipment, do you feel that the lives you finally accepted and agreed upon with the taxpayer were shorter than, the same as, or longer than lives based on actual taxpayer retirement practices? Check one.

Shorter than...1612; same as...1757; longer than...231.

- (7) What proportion of your depreciation case issues for machinery and equipment during this period was agreed to by you and the taxpayer before Conference level or Appellate? Check one.

Less than 50%...199; 50-75%...782; more than 75%...2573.

(8) What proportion of depreciation case issues unagreed at you level was sustained in full at higher level (i.e. Conference, Appellate or Court?) Check one.

Less than 25%...1110; 25%-75%...1309; more than 75%...1185.

(9) What proportion of unagreed depreciation issue cases was later adjusted by Conference, Appellate or Courts to *shorter* lives than you had recommended for depreciable machinery and equipment? Check one.

Less than 25%...2055; 25%-75%...946; more than 75%...529.

(10) During this period (prior to 1/1/62) in your consideration of lives claimed for depreciation did you accept lives claimed if they equaled or exceeded Bulletin "F" without regard to the taxpayer's actual retirement practices? Check one.

Yes...2916; No...664.

(11) Did you use a percentage tolerance in considering whether or not the taxpayers lives claimed for depreciation were acceptable? Check one.

No tolerance...1414; within 10%...1636; greater than 10%...535.

(12) Considering your answers to the foregoing questions, do you feel that you and the IRS, in the period prior to 1962, did establish depreciable lives for taxpayer's machinery and equipment that were less than, the same as, or more than the lives reflected by the taxpayer's actual retirement and replacement practice? Check one.

Less than...1647; same as...1472; more than...337.

II For tax years ending after 1/1/62

For Machinery and Equipment Only

(1) In your experience since 1962 for your taxpayer cases involving deprecation of machinery and equipment; have most, some or few of these taxpayers adopted the guideline procedures of Revenue Procedure 62-21? Check one.

Few...2073; some...913; most...796.

(2) Supply the same information for smaller taxpayers (less than \$1,000,000 in assets) as to the proportion using guideline procedures of Rev. Proc. 62-21. Check one.

Few...2544; some...787; most...455.

- (3) In your cases where taxpayers used guideline depreciation did most of them adopt depreciation guidelines before or during the examination? Check one.

Before....3374; during....381.

- (4) In your opinion is the reserve ratio test workable and practical or unworkable and impractical in its present form? Check one.

Workable and practical....462; unworkable and impractical....3224.

- (5) If you judged the test unworkable and impractical check the item below which most nearly fits the basis for your conclusion.

Complexity of test....1209; lack of taxpayer understanding of test....502; numerous tolerances and adjustment limits invalidate effectiveness of test....1292; assumptions of the test do not fit actual situations....166; other....56.

- (6) How often did you test the reserve for depreciation by using the reserve ratio test? Check one.

Never....1485; 1-10 cases....2041; 10-20 cases....124; 20 or more cases....17.

- (7) In your experience how often did taxpayer fail the reserve ratio test? Check one.

Never....2252; 1-10 cases....1086; 10-20 cases....61; 20 or more cases....18.

- (8) What proportion of taxpayers claiming depreciation during guideline years used a test of facts and circumstances to justify the lives claimed rather than the reserve ratio test or other rules of the procedure? Check one.

0-25%....1620; 25%-75%....804; over 75%....1219.

- (9) In your opinion, are most, some or few taxpayers receiving more favorable depreciation benefits under the depreciation guidelines of Rev. Proc. 62-21 than they might otherwise be able to justify? Check one.

Most....1474; some....1318; few....903.

- (10) Do you favor abandonment of the reserve ratio test? Check one.

Yes....3291; no....423.

- (11) My answers to these questions are based on the following degree of emphasis or experience with the issue of useful life for depreciation in my cases. Check one.

Frequent___1932; infrequent___1838.

- (12) My position in the Service is: Check one.

Revenue agent___3715; engineer___—.

- (13) My years of IRS experience as an agent or engineer are: Check one.

5-10 yrs.____1298; 10-15 yrs.____701; 15-20 yrs.____770; over 20 yrs.____1004.

III Conferees at District Conference Staff For Machinery and Equipment Only

- (1) For pre-1962 years and the depreciation cases coming before you at Conference level, did you sustain the revenue agent's recommendation as to useful life in most, some or few of the cases considered? Check one.

Most___44; some___87; few___26.

- (2) As a matter of general practice for pre-1962 years do you feel the conclusions reached at conference level by you on useful life questions were accurately reflective of taxpayers actual retirement practices, or more, or less than actual retirement practice? Check one.

More than___10; same as___91; less than___55.

- (3) If your answer above indicates that you have disposed of cases at Conference level at useful lives of less than actual retirement practices which, if any, of the following factors most nearly reflects your reasoning for that conclusion? Check one or more.

Technological advances___6; economic obsolescence___32; relative unimportance of useful life in the depreciation equation (question of timing)___22; other___10.

- (4) In your experience, has the reserve ratio test of Rev. Proc. 6221 been helpful in reducing controversies over useful life? Check one.

Yes___38; no___111.

DEPRECIATION SURVEY

ENGINEERS
TOTAL
6-17-71

Revenue Agents & Engineers

I For tax years ending before 1/1/62 For Machinery & Equipment Only

- (1) In your experience did taxpayers claim lives for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...90; same as...14; longer than...3.

- (2) Was the answer given above generally true and consistent or was taxpayer practice erratic? Check one.

Generally consistent...83; erratic...23.

- (3) In your experience did you, during this period (before 1/1/62) more often accept lives claimed for machinery and equipment shorter than, the same as, or longer than Bulletin "F"? Check one.

Shorter than...36; same as...58; longer than...11.

- (4) Was the answer given in question 3 generally consistent or erratic in practice? Check one.

Generally consistent...90; erratic...18.

- (5) In your experience did taxpayers generally claim lives for their equipment on the basis of actual retention or retirement practices; over a longer than; shorter than, retirement practice period? Check one.

Shorter than...89; actual...14; longer than...2.

- (6) In your experience in adjudging taxpayers claimed lives for depreciable equipment, do you feel that the lives you finally accepted and agreed upon with the taxpayer were shorter than, the same as, or longer than lives based on actual taxpayer retirement practices? Check one.

Shorter than...54; same as...51; longer than...2.

- (7) What proportion of your depreciation case issues for machinery and equipment during this period was agreed to by you and the taxpayer before Conference level or Appellate? Check one.

Less than 50%...10; 50-75%...42; more than 75%...54.

- (8) What proportion of depreciation case issues unagreed at your level was sustained in full at higher level (i.e. Conference, Appellate or Court?) Check one.

Less than 25%...34; 25%-75%...42; more than 75%...24.

- (9) What proportion of unagreed depreciation issue cases was later adjusted by Conference, Appellate or Courts to *shorter* lives than you had recommended for depreciable machinery and equipment? Check one.

Less than 25%...50; 25%-75%...25; more than 75%...25.

- (10) During this period (prior to 1/1/62) in your consideration of lives claimed for depreciation did you accept lives claimed if they equaled or exceeded Bulletin "F" without regard to the taxpayer's actual retirement practices? Check one.

Yes...57; No...45.

- (11) Did you use a percentage tolerance in considering whether or not the taxpayers lives claimed for depreciation were acceptable? Check one.

No tolerance...31; within 10%...67; greater than 10%...12.

- (12) Considering your answers to the foregoing questions, do you feel that you and the IRS, in the period prior to 1962, did establish depreciable lives for taxpayer's machinery and equipment that were less than, the same as, or more than the lives reflected by the taxpayer's actual retirement and replacement practice? Check one.

Less than...57; same as...47; more than...2.

II For tax years ending after 1/1/62 For Machinery & Equipment Only

- (1) In your experience since 1962 for your taxpayer cases involving depreciation of machinery and equipment, have most, some or few of these taxpayers adopted the guideline procedures of Revenue Procedure 62-21? Check one.

Few...15; some...25; most...76.

- (2) Supply the same information for smaller taxpayers (less than \$1,000,000 in assets) as to the proportion using guideline procedures of Rev. Proc. 62-21. Check one.

Few...32; some...54; most...21.

- (3) In your cases where taxpayers used guideline depreciation did most of them adopt depreciation guidelines before or during the examination? Check one.

Before...92; during...23.

- (4) In your opinion is the reserve ratio test workable and practical or unworkable and impractical in its present form? Check one.

Workable and practical...31; unworkable and impractical...73.

- (5) If you judged the test unworkable and impractical check the item below which most nearly fits the basis for your conclusion.

Complexity of test...10; lack of taxpayer understanding of test...5; numerous tolerances and adjustment limits invalidate effectiveness of test...64; assumptions of the test do not fit actual situations...5; other...3.

- (6) How often did you test the reserve for depreciation by using the reserve ratio test? Check one.

Never...8; 1-10 cases...63; 10-20 cases...12; 20 or more cases...29.

- (7) In your experience how often did taxpayer fail the reserve ratio test? Check one.

Never...35; 1-10 cases...65; 10-20 cases...7; 20 or more cases...3.

- (8) What proportion of taxpayers claiming depreciation during guideline years used a test of facts and circumstances to justify the lives claimed rather than the reserve ratio test or other rules of the procedure? Check one.

0-25% 75· 25% 75% 99; over 75%...12.

- (9) In your opinion, are most, some or few taxpayers receiving more favorable depreciation benefits under the depreciation guidelines of Rev. Proc. 62-21 than they might otherwise be able to justify? Check one.

Most...99; some...15; few...1.

- (10) Do you favor abandonment of the reserve ratio test? Check one.

Yes...58; no...54.

- (11) My answers to these questions are based on the following degree of emphasis or experience with the issue of useful life for depreciation in my cases. Check one.

Frequent___98; infrequent___16.

- (12) My position in the Service is: Check one.

Revenue agent___—; engineer___116.

- (13) My years of IRS experience as an agent or engineer are: Check one.

5-10 yrs.____66; 10-15 yrs.____33; 15-20 yrs.____11; over 20 yrs.____7.

T.D. 7128 ¹

TITLE 26—INTERNAL REVENUE.—
CHAPTER I, SUBCHAPTER A, PART
1.—INCOME TAX; TAXABLE
YEARS BEGINNING AFTER DE-
CEMBER 31, 1953

Depreciation allowances using asset de-
preciation range system

DEPARTMENT OF THE TREASURY,
OFFICE OF COMMISSIONER
OF INTERNAL REVENUE,
Washington, D.C. 20224.

*To Officers and Employees of the Internal
Revenue Service and Others Con-
cerned:*

On March 13, 1971, notice of proposed rule making with respect to the amendment of the Income Tax Regulations (26 CFR Part 1) under section 167 of the Internal Revenue Code of 1954 relating to depreciation allowances using asset depreciation range system, was published in the Federal Register (36 F.R. 4885). After consideration of all such relevant matter as was presented by interested persons regarding the rules proposed, the following amendments are adopted.

PARAGRAPH 1. The following new section is added immediately after § 1.167(a)-10 to read as follows:

§ 1.167(a)-11 Depreciation based on asset depreciation ranges for property placed in service after December 31, 1970.

(a) *In general*—(1) *Summary.* This section provides an asset depreciation range system for determining the reasonable allowance for depreciation of designated classes of assets placed in service after December 31, 1970. The system is designed to minimize disputes between taxpayers and the Internal Revenue Service as to the useful life of property, and as to salvage value, repairs, and other matters. The system is optional with the taxpayer. The taxpayer has an annual election. Generally, an election for a taxable year will apply to all additions of eligible property during the taxable year of election, but does not apply to additions of eligible property in any other taxable year. The taxpayer's election, made with the return for the taxable year, may not be revoked or modified for any property included in the election. Generally, the taxpayer must establish vintage accounts for all eligible property included in the election, must determine the allowance for depreciation of such property in the taxable year of election, and in subsequent taxable years, on the basis of the asset depreciation period (within the asset depreciation range) specified in the election, and must apply the first-year

¹ 36 F.R. 11924.

convention specified in the election to determine the allowance for depreciation of such property. This section also contains special provisions for the treatment of salvage value, retirements, and the costs of the repair, maintenance, rehabilitation or improvement of property. In general, a taxpayer may not apply any provision of this section unless he makes an election and thereby consents to, and agrees to apply, all the provisions of this section. A taxpayer who elects to apply this section does, however, have certain options as to the application of specified provisions of this section. A taxpayer may elect to apply this section for a taxable year only if for such taxable year he complies with the reporting requirements of paragraph (f)(4) of this section.

(2) *Definitions.* For the meaning of certain terms used in this section, see paragraphs (b)(2) ("eligible property"), (b)(3) ("vintage account" and "vintage"), (b)(4) ("asset depreciation range", "asset guideline class", "asset guideline period", and "asset depreciation period"), (b)(5) (iii)(a) ("used property"), (b)(6)(i) ("public utility property"), (c)(1)(iv) ("original use"), (c)(1)(v) ("unadjusted basis" and "adjusted basis"), (c)(2)(ii) ("modified half-year convention"), (c)(2)(iii) ("half-year convention"), (d)(1)(i) ("gross salvage value"), (d)(1)(ii) ("salvage value"), (d)(2)(iii) ("repair allowance", "repair allowance percentage", and "repair allowance property"), (d)(2)(vi) ("excluded addition"), (d)(2)(vii) ("property improvement"), (d)(3)(ii) ("ordinary retirement" and "extraordinary retirement"), (d)(3)(vi) ("special basis vintage account"), and (e)(1) ("first placed in service") of this section.

(b) *Reasonable allowance using asset depreciation ranges*—(1) *In general.* The allowance for depreciation of eligible property (as defined in sub-

paragraph (2) of this paragraph) to which the taxpayer elects to apply this section shall be determined as provided in paragraph (c) of this section and shall constitute the reasonable allowance for depreciation of such property under section 167(a).

(2) *Definition of eligible property.* For purposes of this section, the term "eligible property" means property which is subject to the allowance for depreciation provided by section 167(a) but only if—

(i) An asset guideline class and period are in effect for such property for the taxable year of election (see paragraph (4) of this paragraph);

(ii) The property is tangible personal property, or is other tangible property (not including a building or its structural components) which (a) is used as an integral part of manufacturing, production, or extraction or of furnishing transportation, communications, electrical energy, gas, water, or sewage disposal services, or (b) constitutes research or storage facilities used in connection with any of the activities described in (a) of this subdivision (but see subparagraph (6) of this paragraph for special rule for certain public utility property as defined in section 167(1)(3)(A));

(iii) The property is first placed in service (as described in paragraph (e)(1) of this section) by the taxpayer after December 31, 1970 (but see subparagraph (7) of this paragraph for special rule where there is a mere change in the form of conducting a trade or business); and

(iv) During the taxable year of election, the property is predominantly used (within the meaning of paragraph (g)(1)(i) and (iii) of § 1.48-1) within the United States (as defined in section 7701(a)(9)), or meets the requirements of paragraph (g)(2) of § 1.48-1 (relating

to exceptions to the requirement of predominant use). See subparagraph (5) (vi) of this paragraph for special rule in the case of change in predominant use.

The language used in subdivision (ii) of this subparagraph shall have the same meaning as when used in section 1245(a) (3) (A) and (B). The term "eligible property" includes any property which meets the requirements of this subparagraph, whether such property is new property, "used property" (as described in subparagraph (5) (iii) (a) of this paragraph), a "property improvement" (as described in paragraph (d) (2) (vii) of this section), or an "excluded addition" (as described in paragraph (d) (2) (vi) of this section). For the treatment of expenditures for the repair, maintenance, rehabilitation or improvement of certain property, see paragraph (d) (2) of this section.

(3) *Requirement of vintage accounts*—(i) *In general.* For purposes of this section, a "vintage account" is a closed-end depreciation account containing eligible property to which the taxpayer elects to apply this section, first placed in service by the taxpayer during the taxable year of election. The "vintage" of an account refers to the taxable year during which the eligible property in the account is first placed in service by the taxpayer. Such an account will consist of an asset, or a group of assets, within a single asset guideline class established pursuant to subparagraph (4) of this paragraph and may contain only eligible property. Each item of eligible property to which the taxpayer elects to apply this section, first placed in service by the taxpayer during the taxable year of election, shall be placed in a vintage account of the taxable year of election. For rule regarding "special basis vintage accounts" for certain property improve-

ments, see paragraphs (d) (2) (viii) and (3) (vi) of this section. Any number of vintage accounts of a taxable year may be established. More than one account of the same vintage may be established for different assets of the same asset guideline class.

(ii) *Special rule.* Property the original use of which does not commence with the taxpayer may not be placed in a vintage account with property the original use of which commences with the taxpayer. Property described in section 167(f) (2) may not be placed in a vintage account with property not described in section 167(f) (2). Property described in section 179(d) (1) for which the taxpayer elects the allowance for the first taxable year in accordance with section 179(c) may not be placed in a vintage account with property not described in section 179(d) (1) or for which the taxpayer does not elect such allowance for the first taxable year. For special rule for property acquired in a transaction to which section 381(a) applies, see paragraph (e) (3) (i) of this section. For additional rules with respect to accounting for eligible property, see paragraph (e) of this section.

(4) *Asset depreciation ranges*—(i) *Selection of asset depreciation period.* An election shall specify for each vintage account of the taxable year of election the asset depreciation period selected by the taxpayer from the asset depreciation range for the assets in such account. For purposes of this section the term "asset guideline class" means a category of assets for which a separate asset guideline period and asset depreciation range is in effect as provided in subdivision (ii) of this subparagraph. Any period within the asset depreciation range for the assets in a vintage account which is a whole number of years, or a whole number of years plus a half year, may be selected.

The lower limit of the asset depreciation range for a vintage account is 80 percent of the asset guideline period established for the assets in the account, and the upper limit of such range is 120 percent of such asset guideline period, determined in each case by rounding any fractional part of a year to the nearer of the nearest whole year or the nearest half year.

(ii) *Establishment of asset guideline classes and periods.* The asset guideline classes and periods, and the asset depreciation ranges determined from such periods in effect for taxable years ending before the effective date of the first supplemental asset guideline classes and periods, and asset depreciation ranges, established pursuant to this section are set forth in Revenue Procedure 71-25 [page 62, this bulletin]. Asset guideline classes and periods, and asset depreciation ranges, will from time to time be established, supplemented and revised with express reference to this section, and will be published in the Internal Revenue Bulletin. The asset guideline classes, the asset guideline periods, and the asset depreciation ranges determined from such periods in effect on the last day of a taxable year of election year shall apply to all vintage accounts of such taxable year; except that the lower limit of the asset depreciation range for any such account shall not be longer than the lower limit of the asset depreciation range for such account in effect on the first day of such taxable year. The reasonable allowance for depreciation of property for any taxable year in a vintage account shall not be changed to reflect any supplement or revision of the asset guideline classes or periods, and asset depreciation ranges, after the end of the taxable year in which the account was established.

(iii) *Applicable guideline classes and*

periods in special situations. (a) An electric or gas utility which would in accordance with Revenue Procedure 64-21 [C.B. 1964 (Part 1), 685] be entitled to use a composite guideline class basis for applying Revenue Procedure 62-21 [C.B. 1962-2, 418] may elect to apply this section on the basis of a composite asset guideline class and asset guideline period determined as provided in Revenue Procedure 64-21. The asset depreciation range for such a composite asset guideline class shall be determined by reference to the composite asset guideline period for the first taxable year to which the taxpayer elects to apply this section and shall not be changed until such time as major variations in the asset mix or the asset guideline classes or periods justify some other composite asset guideline period. For the purposes of this section, all property in the composite asset guideline class shall be treated as included in a single asset guideline class. If the taxpayer elects to apply this subdivision, the election shall be made on the tax return filed for the first taxable year for which the taxpayer elects to apply this section. An election to apply this subdivision for any taxable year shall apply to all succeeding taxable years to which the taxpayer elects to apply this section, except to the extent the election to apply this subdivision is with the consent of the Commissioner terminated with respect to a succeeding taxable year and all taxable years thereafter.

(b) For purposes of this section, property shall be included in the asset guideline class for the activity in which the property is primarily used. See paragraph (e)(3)(iii) of this section for rule for leased property. Property shall be classified according to primary use even though the activity in which such property is primarily used is in-

substantial in relation to all the taxpayer's activities. No change in the classification of property shall be made because of a change in primary use after the end of the taxable year in which property is first placed in service.

(c) An incorrect classification by the taxpayer of property for the purposes of this section (such as under (b) of this subdivision or under subparagraph (2) of this paragraph) shall not cause or permit a revocation of the election to apply this section for the taxable year in which such property was first placed in service. The classification of such property shall be corrected. All adjustments necessary to the correction shall be made, including adjustments of unadjusted basis, adjusted basis, salvage value, the reserve for depreciation of all vintage accounts affected, and the amount of depreciation allowable for all taxable years involved. If because of incorrect classification, property included in an election to apply this section was not placed in a vintage account and no asset depreciation period was selected for the property or the property was placed in a vintage account but an asset depreciation period was selected from an incorrect asset depreciation range, the taxpayer shall place the property in a vintage account and select an asset depreciation period for the account from the correct asset depreciation range. The asset depreciation period selected shall be specified on the tax return filed for the taxable year during which the classification of the property is determined to be incorrect.

(d) If for a taxable year for which the taxpayer elects to apply this section, the taxpayer computes depreciation for eligible property first placed in service during the taxable year under a

method of depreciation described in subparagraph (5)(v)(a) of this paragraph, then all eligible property in the same asset guideline class as such property shall be excluded from the election. However, if the taxpayer establishes to the satisfaction of the Commissioner that a method of depreciation described in subparagraph (5)(v)(a) of this paragraph was adopted for property in the asset guideline class on the basis of a good faith mistake as to the proper asset guideline class for the property, then the taxpayer may terminate (as of the beginning of the taxable year) such method of depreciation with respect to all eligible property in the asset guideline class which was first placed in service during the taxable year. In such event, the taxpayer's election to apply this section shall include eligible property in the asset guideline class without regard to subparagraph (5)(v)(a) of this paragraph. The provisions of (c) of this subdivision shall apply to the correction in the classification of the property.

(iv) *Examples.* The principles of this subparagraph may be illustrated by the following examples:

Example (1). Corporation *X* purchases a bulldozer for use in its construction business. The bulldozer is first placed in service in 1972. Since the bulldozer is tangible personal property, predominantly used within the United States, for which an asset guideline class and period have been established, the bulldozer is eligible property. The bulldozer is in asset guideline class 15.1 of Revenue Procedure 71-25, and the asset depreciation range is 4-6 years.

Example (2). In 1972 corporation *Y* first places in service a factory building. It is not eligible property, since it

does not meet the requirements of subparagraph (2) (ii) of this paragraph.

Example (3). In January of 1971, corporation *Y*, a calendar year taxpayer, pays or incurs \$2,000 for the rehabilitation and improvement of machine *A* which was first placed in service in 1969. On January 1, 1971, corporation *Y* first placed in service machines *B* and *C*, each with an unadjusted basis of \$10,000. Machines *B* and *C* are eligible property. Machine *A* would be eligible property but for the fact it was first placed in service prior to January 1, 1971 (that is, machine *A* is eligible property determined without regard to subparagraph (2) (iii) of this paragraph). Corporation *Y* elects to apply this section for the taxable year, and adopts the modified half-year convention described in paragraph (c) (2) (ii) of this section, but does not elect to apply the asset guideline class repair allowance described in paragraph (d) (2) (iii) of this section. Machines *A*, *B*, and *C* are in asset guideline class 24.4 under Revenue Procedure 71-25 for which the asset depreciation range is 8 to 12 years. The \$2,000 expended on machine *A* substantially increases its capacity and is a capital expenditure under sections 162 and 263. The \$2,000 is a property improvement (as defined in paragraph (d) (2) (vii) (b) of this section) which is eligible property. However, corporation *Y* by good faith mistakes treats the property improvement of \$2,000 as a deductible repair and includes machine *B* in asset guideline class 24.3 under Revenue Procedure 71-25 for which the asset depreciation range is 5 to 7 years. Corporation *Y* establishes vintage accounts for 1971, and computes depreciation for 1971 and 1972 as follows:

	12-31-72 reserve for depreciation	12-31-72 adjusted basis
Vintage account for machine <i>B</i> , with an asset depreciation period of 5 years and an unadjusted basis of \$10,000 for which corporation <i>Y</i> adopts the straight line method.....	\$4, 000	\$6, 000
Vintage account for machine <i>C</i> , with an asset depreciation period of 8 years and an unadjusted basis of \$10,000 for which corporation <i>Y</i> adopts the straight line method.....	2, 500	7, 500

After audit in 1973 of corporation *Y*'s taxable years 1971 and 1972, it is determined that the \$2,000 paid in 1971 for the rehabilitation and improvement of machine *A* is a capital expenditure and that machine *B* is in asset guideline class 24.4. The incorrect classification is corrected. Corporation *Y* places machine *B* and the property improvement in a vintage account of 1971 and on its tax return filed for 1973 selects an asset depreciation period of 8 years for that account. Giving effect to the correction in classification of the property in accordance with subdivision (iii) (c) of this subparagraph, at the end of 1972 the unadjusted basis, reserve for depreciation, and adjusted basis of the vintage account for machine *B* and the property improvement with respect to machine *A* are \$12,000, \$3,000, and \$9,000, respectively. Corporation *Y*'s deduction of the \$2,000 property improvement in 1971 as a repair expense under section 162 is disallowed. For 1971 and 1972 deprecia-

tion deductions are disallowed in the amount of \$500 each year (that is, \$750 excess annual depreciation on machine *B* minus \$250 annual depreciation on the property improvement).

Example (4). In 1971, corporation *X*, a calendar year taxpayer, first places in service machines *A* through *M*, all of which are eligible property. All the machines except machine *A* are in asset guideline class 24.3 under Revenue Procedure 71-25. Machine *A* is in asset guideline class 24.4 under Revenue Procedure 71-25. By good faith mistake as to proper classification, corporation *X* includes both machine *A* and machine *B* in asset guideline class 24.4. Corporation *X* consistently uses the machine hour method of depreciation on property in asset guideline class 24.4 and for 1971 computes depreciation for machines *A* and *B* under that method. Corporation *X* elects to apply this section for 1971 on the assumption that the election includes machines *C* through *M* which are in asset guideline class 24.3. In 1973, upon audit of corporation *X*'s taxable years 1971 and 1972, it is determined that machine *B* is included in asset guideline class 24.3 and that since for 1971 corporation *X* computed depreciation on machine *B* under the machine hour method, in accordance with subparagraph (5)(v)(a) of this paragraph all property in asset guideline class 24.3 (machines *B* through *M*) is excluded from corporation *X*'s election to apply this section for 1971. Although corporation *X* has consistently used the machine hour method for asset guideline class 24.4, corporation *X* has not in the past used the machine hour method for machines of the type and function of machines *C* through *M* which are in asset guideline class 24.3. Both machine *A* and machine *B* are used in connection with the manufacture of wood products. There is reasonable basis for corporation *X* having assumed that machine *B*

is in asset guideline class 24.4 along with machine *A* to which it is similar. Corporation *X* establishes to the satisfaction of the Commissioner that it used the machine hour method for machine *B* on the basis of a good faith mistake as to the proper classification of the machine. Corporation *X* can terminate the machine hour method of depreciation for machine *B* as of the beginning of 1971, and in that event corporation *X*'s election to apply this section for 1971 will apply to machines *B* through *M* without regard to subparagraph (5)(v)(a) of this paragraph. The adjustments provided in subdivision (iii)(c) of this subparagraph will be made as a result of the correction in classification of property.

(5) *Requirements of election*—(i) *In general.* Except as otherwise provided in paragraph (d)(2) of this section dealing with expenditures for the repair, maintenance, rehabilitation or improvement of certain property, no provision of this section shall apply to any property other than eligible property to which the taxpayer elects, in accordance with this section, to apply this section. For the time and manner of election, see paragraph (f) of this section. Except as otherwise provided in subdivisions (v) and (vi) of this subparagraph and in subparagraph (6)(iii) of this paragraph, a taxpayer's election to apply this section may not be revoked or modified after the last day prescribed for filing the election. Thus, for example, after such day, a taxpayer may not cease to apply this section to property included in the election, establish different vintage accounts for the taxable year of election, select a different period from the asset depreciation range for any such account, or adopt a different first-year convention for any such account.

(ii) *Property required to be included in election.* Except as otherwise provided in subdivision (iii) of this

subparagraph dealing with certain "used property", in subdivision (iv) of this subparagraph dealing with "section 38 property" in subdivision (v) of this subparagraph dealing with property subject to special depreciation or amortization, and in paragraph (e) (3) (i) of this section dealing with transactions to which section 381(a) applies, if the taxpayer elects to apply this section to any eligible property first placed in service by the taxpayer during the taxable year of election, the election shall apply to all such eligible property, whether placed in service in a trade or business or held for production of income.

(iii) *Special 10 percent used property rule.* (a) If the unadjusted basis of eligible "used property" first placed in service by the taxpayer during the taxable year of election exceeds 10 percent of the unadjusted basis of all eligible property first placed in service during the taxable year of election, the taxpayer may exclude all (but not less than all) the eligible used property from the election to apply this section. For the purposes of this section, the term "used property" means property the original use of which does not commence with the taxpayer.

(b) Solely for the purpose of determining whether the 10 percent rule of this subdivision is satisfied, (1) used property first placed in service during the taxable year and subject to special depreciation or amortization provisions described in subsection (v) of this subparagraph and (2) property acquired during the taxable year in a transaction to which section 381(a) applies, shall all be treated as used property regardless of whether such property would be treated as new property under section 167(c) and the regulations thereunder.

(iv) *Property subject to investment tax credit.* The taxpayer may exclude

from an election to apply this section all, or less than all, units of eligible property first placed in service during the taxable year which is—

(a) "Section 38 property" as defined in section 48(a) which meets the requirements of section 49, or

(b) Property described in section 47 (a) (5) (B) placed in service to replace section 38 property disposed of.

(v) *Property subject to special method of depreciation or amortization.* (a) If for the taxable year of election, the taxpayer computes depreciation under the unit of production, retirement or machine hour method or any other method not described in section 167(b) (1), (2), or (3) for any eligible property first placed in service during the taxable year, an election to apply this section for the taxable year shall not include such property or any other eligible property in the same asset guideline class as such property.

(b) An election to apply this section shall not include eligible property for which, for the taxable year of election, the taxpayer computes depreciation under section 167(k), or computes amortization under section 169, 184, 185, 187, or paragraph (b) of § 1.162-11. If the taxpayer has elected to apply this section to eligible property described in section 167(k), 169, 184, 185, or 187 and the taxpayer thereafter computes depreciation or amortization for such property for any taxable year in accordance with section 167(k), 169, 184, 185, or 187, then the election to apply this section to such property shall terminate as of the beginning of the taxable year for which depreciation or amortization is computed under such section. Application of this section to the property for any period prior to the termination date will not be affected by the termination. The unadjusted basis of the property shall be removed as of the

termination date from the unadjusted basis of the vintage account. The depreciation reserve established for the account shall be reduced by the depreciation allowable for the property, computed in the manner prescribed in paragraph (c) (1) (v) (b) of this section for determination of the adjusted basis of the property. See paragraph (d) (3) (vii) (d) of this section for treatment of salvage value when property is removed from a vintage account.

(vi) *Change in predominant use of eligible property.* If eligible property in a vintage account ceases to meet the requirements of paragraph (g) (1) (i) and (iii) or (g) (2) of § 1.48-1 (relating to requirement of predominant use within the United States) for a taxable year, the election to apply this section to such property shall terminate as of the beginning of such taxable year. The application of this section to such property for a period prior to the termination date will not be affected. The unadjusted basis of the property shall be removed as of the termination date from the unadjusted basis of the vintage account. The depreciation reserve established for the account shall be reduced by the depreciation allowable for the property, computed in the manner prescribed in paragraph (c) (1) (v) (b) of this section for determination of the adjusted basis of the property. See paragraph (d) (3) (vii) (d) of this section for treatment of salvage value when property is removed from a vintage account.

(6) *Special rule for certain public utility property*—(i) *Requirement of normalization in certain cases.* Under section 167(l), in the case of public utility property (as defined in section 167(l) (3) (A)), if the taxpayer—

(a) Is entitled to use a method of depreciation other than a “subsection (l) method” of depreciation (as defined in section 167(l) (3)

(F)) only if it uses the “normalization method of accounting” (as defined in section 167(l) (3) (G)) with respect to such property, or

(b) Is entitled to use only a “subsection (l) method” of depreciation,

such property shall be eligible property (as defined in subparagraph (2) of this paragraph) only if the taxpayer normalizes the tax deferral resulting from the election to apply this section.

(ii) *Normalization.* The taxpayer will be considered to normalize the tax deferral resulting from the election to apply this section only if it computes its tax expense for purposes of establishing its cost of service for rate making purposes and for reflecting operating results in its regulated books of account using—

(a) either (1) the half-year convention described in paragraph (c) (2) (iii) of this section, or (2) the convention used in computing its depreciation expense for rate making purposes and for reflecting operating results in its regulated books of account, and

(b) a period for depreciation no less than the lesser of 100 percent of the asset guideline period in effect in accordance with subparagraph (4) (ii) of this paragraph for the first taxable year to which this section applies, or the period for computing its depreciation expense for rate making purposes and for reflecting operating results in its regulated books of account,

and makes adjustments to a reserve to reflect the deferral of taxes resulting from the election to apply this section. A determination whether the taxpayer is considered to normalize (within the meaning of the preceding sentence) the tax deferral resulting from the election to apply this section shall be

made in a manner consistent with the principles for determining whether a taxpayer is using the "normalization method of accounting" (within the meaning of section 167(1)(3)(G)). See § 13.13 of the temporary regulations prescribed by T.D. 7049 [C.B. 1970-2, 61] approved June 25, 1970.

(iii) *Failure to normalize.* If the taxpayer has elected to apply this section to any eligible public utility property as described in subdivision (i) of this subparagraph and the taxpayer thereafter fails to normalize the tax deferral resulting from the election to apply this section, the election to apply this section to such property shall terminate as of the beginning of the taxable year for which the taxpayer fails to normalize the tax deferral resulting from the election to apply this section. Application of this section to such property for any period prior to the termination date will not be affected by the termination. The unadjusted basis of the property shall be removed as of the termination date from the unadjusted basis of the vintage account. The depreciation reserve established for the account shall be reduced by the depreciation allowable for the property, computed in the manner prescribed in paragraph (c)(1)(v)(b) of this section for determination of the adjusted basis of the property. See paragraph (d)(3)(vii)(d) of this section for treatment of salvage value when property is removed from a vintage account.

(iv) *Examples.* The principles of this subparagraph may be illustrated by the following examples:

Example (1). Corporation A is a gas pipeline company, subject to the jurisdiction of the Federal Power Commission, which is entitled under section 167(1) to use a method of depreciation other than a "subsection (1) method" of depreciation (as defined in section 167(1)(3)(F)) only if it uses the "normalization method of accounting"

(as defined in section 167(1)(3)(G)). Corporation A elects to apply this section for 1972 with respect to all eligible property. In 1972, corporation A places in service eligible property with an unadjusted basis of \$2 million. One hundred percent of the asset guideline period for such property is 22 years and the asset depreciation range is from 17.5 years to 26.5 years. The taxpayer uses the double declining balance method of depreciation, selects an asset depreciation period of 17.5 years and applies the modified half-year convention (described in paragraph (c)(2)(ii) of this section) by treating all such property as placed in service on the first day of the second quarter of the taxable year. The depreciation allowable under this section with respect to such property in 1972 is \$171,428. The taxpayer will be considered to normalize the tax deferral resulting from the election to apply this section and to use the "normalization method of accounting" (within the meaning of section 167(1)(3)(G)) if it computes its tax expense for purposes of determining its cost of service for rate making purposes and for reflecting operating results in its regulated books of account using a "subsection (1) method" of depreciation, such as the straight line method, determined by using a depreciation period of 22 years (that is, 100 percent of the asset guideline period) and applying the half-year convention (described in paragraph (c)(2)(iii) of this section). A depreciation allowance computed in this manner is \$45,454. The difference in the amount determined under this section (\$171,428) and the amount used in computing its tax expense for purposes of estimating its cost of service for rate making purposes and for reflecting operating results in its regulated books of account (\$45,454) is \$125,974. Assuming a tax rate of 48 percent, the deferral of taxes resulting from an elec-

tion to apply this section and using a different method of depreciation for tax purposes from that used for establishing its cost of service for rate making purposes and for reflecting operating results in its regulated books of account is 48 percent of \$125,974, or \$60,467, which amount should be added to a reserve to reflect the deferral of taxes resulting from the election to apply this section and from the use of a different method of depreciation in computing the allowance for depreciation under section 167 from that used in computing its depreciation expense for purposes of establishing its cost of service for rate making purposes and for reflecting operating results in its regulated books of account.

Example (2). Assume the same facts as in Example (1) except that Corporation *A* applies the half-year convention (described in paragraph (c)(2)(iii) of this section). In 1972, the depreciation allowance under this section with respect to property placed in service in 1972 is \$114,285. A depreciation allowance computed as in Example (1) for purposes of determining its cost of service for rate making purposes and for reflecting operating results in its regulated books of account is \$45,454. The difference in the amount determined under this section (\$114,285) and the amount used in computing its tax expense for purposes of establishing its cost of service for rate making purposes and for reflecting operating results in its regulated books of account (\$45,454) is \$68,831. Assuming a tax rate of 48 percent, the deferral of taxes resulting from an election to apply this section and using a different method of depreciation for tax purposes from that used for establishing its cost of service for rate making purposes and for reflecting operating results in its regulated books of account is 48 percent of \$68,831, or \$33,039, which

amount should be added to a reserve to reflect the deferral of taxes resulting from the election to apply this section and from the use of a different method of depreciation in computing the allowance for depreciation under section 167 from that used in computing its depreciation expense for purposes of estimating its cost of services for rate making purposes and for reflecting operating results in its regulated books of account.

Example (3). Corporation *B*, a telephone company subject to the jurisdiction of the Federal Communications Commission used a "flow-through method of accounting" (as defined in section 167(1)(3)(H)) for its "July 1969 accounting period" (as defined in section 167(1)(3)(I)) with respect to all of its pre-1970 public utility property and did not make an election under section 167(1)(4)(A). Thus, Corporation *B* is entitled under section 167(1) to use a method of depreciation other than a "subsection (1) method" with respect to certain property without using the "normalization method of accounting." In 1972, Corporation *B* makes an election to apply this section with respect to all eligible property. Corporation *B* is not required to normalize the tax deferral resulting from the election to apply this section in the case of property for which it is not required to use the "normalization method of accounting" under section 167(1).

Example (4). Assume the same facts as in Example (3) except that Corporation *B* made a timely election under section 167(1)(4)(A) that section 167(1)(2)(C) not apply with respect to property which increases the productive or operational capacity of the taxpayer. Corporation *B* must normalize the tax deferral resulting from the election to apply this section with respect to such property.

(7) *Mere change in form of conducting a trade or business.* Property which was first placed in service by the transferor before January 1, 1971, shall not be eligible property if such property is first placed in service by the transferee after December 31, 1970, by reason of a mere change in the form of conducting a trade or business in which such property is used. A mere change in the form of conducting a trade or business in which such property is used will be considered to have occurred if—

(i) The transferor (or in a case where the transferor is a partnership, estate, trust, or corporation, the partners, beneficiaries, or shareholders) of such property retains a substantial interest in such trade or business, or

(ii) The basis of such property in the hands of the transferee is determined in whole or in part by reference to the basis of such property in the hands of the transferor.

This subparagraph shall not apply to a transfer of property to which paragraph (e) (3) (i) (relating to transfers to which section 381(a) applies) applies. For purposes of this subparagraph, a transferor (or in a case where the transferor is a partnership, estate, trust, or corporation, the partners, beneficiaries, or shareholders) shall be considered as having retained a substantial interest in the trade or business only if, after the change in form, his (or their) interest in such trade or business is substantial in relation to the total interest of all persons in such trade or business. This subparagraph shall apply to property first placed in service prior to January 1, 1971, held for the production of income (within the meaning of section 167(a)(2)) as well as to property held in a trade or business. The principles of this subdivision may be illustrated by the following examples.

Example (1). Corporation *X* and Corporation *Y* are includible corporations in an affiliated group as defined in section 1504. In 1971 Corporation *X* sells to Corporation *Y* for cash property which would meet the requirements of subparagraph (2) of this paragraph for eligible property except that the property was first placed in service by Corporation *X* in 1970. After the transfer, the property is first placed in service by Corporation *Y* in 1971. The property is not eligible property because of the mere change in the form of conducting a trade or business.

Example (2). In 1971, in a transaction to which section 351 applies, taxpayer *B* transfers to Corporation *W* property which would meet the requirements of subparagraph (2) of this paragraph for eligible property except that the property was first placed in service by *B* in 1969. Corporation *W* first places the property in service in 1971. The property is not eligible property because of the mere change in the form of conducting a trade or business.

(c) *Manner of determining allowance—(1) In general—(i) Computation of allowance.* (a) The allowance for depreciation of property in a vintage account shall be determined in the manner specified in this paragraph by using the method of depreciation adopted by the taxpayer for the account and a rate based upon the asset depreciation period for the account selected by the taxpayer from the asset depreciation range. (For limitations on methods of depreciation permitted with respect to property, see section 167(c) and subdivision (iv) of this subparagraph.) In applying the method of depreciation adopted by the taxpayer, the annual allowance for depreciation of a vintage account shall be determined without adjustment for the salvage value of the property in such account except that no account may be

depreciated below the reasonable salvage value of the account. (For rules regarding estimation and treatment of salvage value, see paragraph (d) (1) and (3) (vii) and (viii) of this section.) Regardless of the method of depreciation adopted by the taxpayer, the depreciation allowable for a taxable year with respect to a vintage account may not exceed the amount by which (as of the beginning of the taxable year) the unadjusted basis of the account exceeds (1) the reserve for depreciation established for the account plus (2) the salvage value of the account. The unadjusted basis of a vintage account is defined in subdivision (v) of this subparagraph. The adjustments to the depreciation reserve are described in subdivision (ii) of this subparagraph.

(b) The annual allowance for depreciation of a vintage account using the straight line method of depreciation shall be determined by dividing the unadjusted basis of the vintage account (without reduction for salvage value) by the number of years in the asset depreciation period selected for the account. See subdivision (iii) of this subparagraph for the manner of computing the depreciation allowance following a change from the declining balance method or the sum of the years-digits method to the straight line method.

(c) In the case of the sum of the years-digits method, the annual allowance for depreciation of a vintage account shall be computed by multiplying the unadjusted basis of the vintage account (without reduction for salvage value) by a fraction, the numerator of which changes each year to a number which corresponds to the years remaining in the asset depreciation period selected for the account (including the year for which the allowance is being computed) and the denominator of which is the sum of all the year's digits

corresponding to the asset depreciation period selected for the account.

(d) The annual allowance for depreciation of a vintage account using a declining balance method is determined by applying a uniform rate to the excess of the unadjusted basis of the vintage account over the depreciation reserve established for that account. The rate under the declining balance method may not exceed twice the straight line rate based upon the asset depreciation period for the vintage account.

(e) The allowance for depreciation under this paragraph (including any depreciation allowed under section 179) shall constitute the amount of depreciation allowable for all purposes of this section.

(ii) *Establishment of depreciation reserve.* The taxpayer must establish a depreciation reserve for each vintage account. The amount of the depreciation reserve for a vintage account must be stated on each income tax return on which depreciation with respect to such account is determined under this section. The depreciation reserve for a vintage account consists of the accumulated depreciation allowable with respect to the vintage account, increased by the adjustments for ordinary retirements prescribed by paragraph (d) (3) (iii), by the adjustments for reduction of the salvage value of a vintage account prescribed by paragraph (d) (3) (vii) (c) of this section, and by the adjustments for transfers to supplies or scrap prescribed by paragraph (d) (3) (viii) (b) of this section, and decreased by the adjustments for extraordinary retirements and certain special retirements as prescribed by (d) (3) (iv) and (v) of this section, by the adjustments for the amount of the reserve in excess of the unadjusted basis of a vintage account prescribed by paragraph (d) (3) (ix) (a) of this sec-

tion, and by the adjustments for property removed from a vintage account prescribed by paragraph (b)(5)(v)(b) and (vi) and paragraph (b)(6)(iii) of this section. The adjustments to the depreciation reserve for ordinary retirements during the taxable year shall be made as of the beginning of the taxable year. The adjustments to the depreciation reserve for extraordinary retirements shall be made as of the date the retirement is treated as having occurred in accordance with the first-year convention (described in subparagraph (2) of this paragraph) adopted by the taxpayer for the vintage account. The adjustment to the depreciation reserve for reduction of salvage value and for transfers to supplies or scrap shall, in the case of an ordinary retirement, be made as of the beginning of the taxable year, and in the case of an extraordinary retirement the adjustment for reduction of salvage value shall be made as of the date the retirement is treated as having occurred in accordance with the first-year convention (described in subparagraph (2) of this paragraph) adopted by the taxpayer for the vintage account. The adjustment to the depreciation reserve for property removed from a vintage account in accordance with paragraph (b)(5)(v)(b) and (vi) and paragraph (b)(6)(iii) of this section shall be made as of the beginning of the taxable year. The depreciation reserve of a vintage account may not be decreased below zero.

(iii) *Consent to change in method of depreciation.* During the asset depreciation period for a vintage account, the taxpayer is permitted to change under this section from a declining balance method of depreciation to the sum of the years-digits method of depreciation and from a declining balance method of depreciation or the sum of the years-digits method of depreci-

tion to the straight line method of depreciation with respect to such account. The provision of § 1.167(e)-1 shall not apply to such change. The change in method applies to all property in the vintage account and must be adhered to for the entire taxable year of the change. When a change is made to the straight line method of depreciation, the annual allowance for depreciation of the vintage account shall be determined by dividing the adjusted basis of the vintage account (without reduction for salvage value) by the number of years remaining (at the time as of which the change is made) in the asset depreciation period selected for the account. However, the depreciation allowable for any taxable year following a change to the straight line method may not exceed an amount determined by dividing the unadjusted basis of the vintage account (without reduction for salvage value) by the number of years in the asset depreciation period selected for the account. The taxpayer shall furnish a statement setting forth the vintage accounts for which the change is made with the income tax return filed for the taxable year of the change.

(iv) *Limitations on methods.* The same method of depreciation must be adopted for all property in a single vintage account. Generally, the method of depreciation which may be adopted is subject to the limitations contained in section 167(c). In the case of a vintage account for which the taxpayer has selected an asset depreciation period of 3 years or more and which contains property the original use of which commences with the taxpayer, any method of depreciation described in section 167(b) (1), (2) or (3) may be adopted. If the vintage account contains property the original use of which does not commence with the taxpayer, or if the asset depreciation period for the account selected by the

taxpayer is less than 3 years, a method of depreciation described in section 167(b) (2) or (3) may not be adopted for the account. However, the declining balance method using a rate not in excess of 150 percent of the straight line rate based upon the asset depreciation period for the vintage account may be adopted for the account even if the original use of the property does not commence with the taxpayer provided the asset depreciation period for the account selected by the taxpayer is at least 3 years. The term "original use" means the first use to which the property is put, whether or not such use corresponds to the use of such property by the taxpayer. (See § 1.167(c)-1.)

(v) *Unadjusted and adjusted basis.*

(a) For purposes of this section, the unadjusted basis of an asset (including an "excluded addition" and a "property improvement" as described, respectively, in paragraph (d) (2) (vi) and (vii) of this section) is its cost or other basis without any adjustment for depreciation or amortization but with other adjustments required under section 1016 or other applicable provisions of law. The unadjusted basis of a vintage account is the total of the unadjusted bases of all the assets in the account. The unadjusted basis of a "special basis vintage account" as described in paragraph (d) (3) (vi) of this section is the amount of the property improvement determined in paragraph (d) (2) (vii) (a) of this section.

(b) The adjusted basis of a vintage account is the amount by which the unadjusted basis of the account exceeds the reserve for depreciation for the account. The adjusted basis of an asset in a vintage account is the amount by which the unadjusted basis of the asset exceeds the amount of depreciation allowable for the asset computed by using the method of depreciation and the rate (including any deprecia-

tion allowed under section 179 for the asset) applicable to the account. For purposes of this subdivision, the depreciation allowable for an asset shall include, to the extent identifiable, the amount of proceeds previously added to the depreciation reserve in accordance with paragraph (d) (3) (iii) of this section upon the retirement of any portion of such asset. (See paragraph (d) (3) (vi) of this section for election under certain circumstances to allocate adjusted basis of an amount of property improvement determined under paragraph (d) (2) (vii) (a) of this section.)

(2) *Conventions applied to additions and retirements*—(i) *In general.* The allowance for depreciation of a vintage account (whether an item account or a multiple asset account) shall be determined by applying one of the conventions described in subdivision (ii) and (iii) of this subparagraph. (For the manner of applying a convention in the case of taxable years beginning before and ending after December 31, 1970, see subparagraph (3) of this paragraph.) The same convention must be adopted for all vintage accounts of a taxable year, but the same convention need not be adopted for the vintage accounts of another taxable year. An election to apply this section must specify the convention adopted. (See paragraph (f) of this section for information required in making the election.) The convention adopted by the taxpayer is a method of accounting for purposes of section 446, but the consent of the Commissioner will be deemed granted to make an annual adoption of either of the conventions described in subdivision (ii) and (iii) of this subparagraph.

(ii) *Modified half-year convention.* The depreciation allowance for a vintage account for which the taxpayer

adopts the "modified half-year convention" shall be determined by treating:

- (a) all property in such account which is placed in service during the first half of the taxable year as placed in service on the first day of the taxable year; and
- (b) all property in such account which is placed in service during the second half of the taxable year as placed in service on the first day of the second half of the taxable year. The depreciation allowance for a vintage account for a taxable year in which there is an extraordinary retirement (as defined in paragraph (d)(3)(ii) of this section) is determined by treating all extraordinary retirements from such account during the first half of the taxable year as occurring on the first day of the taxable year and all extraordinary retirements from such account during the second half of the taxable year as occurring on the first day of the last half of the taxable year. This convention may also be applied by assuming, with respect to all vintage accounts of a taxable year, that all additions occur on the first day of the second quarter of the taxable year and that all extraordinary retirements occur on the first day of the second quarter of the taxable year.

(iii) *Half-year convention.* The depreciation allowance for a vintage account for which the taxpayer adopts the "half-year convention" shall be determined by treating all property in the account as placed in service on the first day of the second half of the taxable year and by treating all extraordinary retirements (as defined in paragraph (d)(3)(ii) of this section) from the account as occurring on the first day of the second half of the taxable year.

(iv) *Rules of application.* The first-year convention adopted for a vintage account must be consistently applied to all additions to and all extraordinary

retirements from such account. See paragraph (d)(3)(ii) and (iii) for definition and treatment of ordinary retirements. For purposes of this subparagraph, the second half of a taxable year shall be deemed to commence on the beginning of the first day of a calendar month which is the closest such first day to the middle of the taxable year. The first half of the taxable year shall be deemed to expire at the close of the last day of a calendar month which is the closest such last day to the middle of the taxable year. Rules consistent with the preceding two sentences shall apply for purposes of determining the commencement of the second quarter of the taxable year and the expiration of the first quarter of the taxable year. If a taxable year consists of a period which includes only one calendar month, the first half of the taxable year shall be deemed to expire on the first day which is nearest to the midpoint of the month, and the second half of the taxable year shall begin the day after the expiration of the first half of the month.

(3) *Taxable years beginning before and ending after December 31, 1970.* In the case of a taxable year which begins before January 1, 1971, and ends after December 31, 1970, property first placed in service after December 31, 1970, but treated as first placed in service before January 1, 1971, by application of a convention described in subparagraph (2) of this paragraph shall be treated as provided in this subparagraph. The depreciation allowed (or allowable) for the taxable year shall consist of the depreciation allowed (or allowable) for the period before January 1, 1971, determined without regard to this section plus the amount allowable for the period after December 31, 1970, determined under this section. However, neither the modified half-year convention described in sub-

paragraph (2) (ii) of this paragraph, nor the half-year convention described in subparagraph (2) (iii) of this paragraph may be applied with respect to property placed in service after December 31, 1970, to allow depreciation for any period prior to January 1, 1971, unless such application is consistent with the convention applied by the taxpayer with respect to property placed in service in such taxable year prior to January 1, 1971.

(4) *Examples.* The principles of this paragraph may be illustrated by the following examples:

Example (1). Taxpayer A, a calendar year taxpayer, places new property in service in a trade or business as follows:

Asset	Placed in service	Unadjusted basis
W.....	Apr. 1, 1971	\$5,000
X.....	June 30, 1971	8,000
Y.....	July 15, 1971	12,000
Z.....	Dec. 20, 1971	60,000

(i) Taxpayer A adopts the modified half-year convention described in subparagraph (2) (ii) of this paragraph. Assets W, X, and Y are placed in a multiple asset account for which the asset depreciation range is 8 to 12 years. A selects 8 years, the minimum asset depreciation period with respect to such assets, and adopts the declining balance method of depreciation using a rate twice the straight line rate (computed without reduction for salvage). The annual rate under this method using a period of 8 years is 25 percent. The depreciation allowance for assets W and X for 1971 is \$3,250, a full year's depreciation under the modified half-year convention (that is, basis of \$13,000 (unreduced by salvage) multiplied by 25 percent). The depreciation allowance for asset Y is \$1,500, a half year's depreciation under the modified half-year convention (that is, basis of

\$12,000 (unreduced by salvage) multiplied by 25 percent, then multiplied by $\frac{1}{2}$, since the property is entitled to only a half year's depreciation).

(ii) The taxpayer places asset Z in an item account and adopts the sum of the years-digits method. The asset depreciation range for such asset is 4 to 6 years and the taxpayer selects an asset depreciation period of 5 years. The depreciation allowance for asset Z in 1971 is \$10,000 (that is, basis of \$60,000 (unreduced by salvage) multiplied by $\frac{5}{15}$, the appropriate fraction using the sum of the years-digit method, then multiplied by $\frac{1}{2}$, since only one half year's depreciation is allowable under the convention).

Example (2). The facts are the same as in example (1), except that the taxpayer adopts the half-year convention described in subparagraph (2) (iii) of this paragraph. The depreciation allowances in example (1) with respect to assets Y and Z are not affected. However, assets W and X are entitled to a depreciation allowance for only a half year. Thus, the depreciation allowance for assets W and X for 1971 is \$1,625 (that is, $\frac{1}{2}$ of the \$3,250 allowance computed in example (1)).

Example (3). The taxpayer during his taxable year which begins April 1, 1970, and ends March 31, 1971, places new property in service in a trade or business as follows:

Assets	Placed in service
A -----	Apr. 30, 1970
B -----	Dec. 15, 1970
C -----	Jan. 1, 1971

The taxpayer had used a convention with respect to assets placed in service in prior taxable years whereby assets placed in service during the first half of the year are treated as placed in service on the first day of such year and assets placed in service in the second half of the year are treated as placed

in service on the first day of the following year. If the taxpayer selects the modified half-year convention, one year's depreciation is allowable on asset *A* determined without regard to this section. No depreciation is allowable for asset *B*. No depreciation is allowable for asset *C* for the period prior to January 1, 1971, but one-fourth year's depreciation is allowable on asset *C* determined under this section.

Example (4). Assume the same facts as in Example (3) except that the taxpayer had used a convention with respect to assets placed in service in prior taxable years whereby such assets are treated as placed in service at the mid-point of the year. If the taxpayer selects the modified half-year convention, one-half year's depreciation is allowable for asset *A* determined without regard to this section. One-half year's depreciation is allowable for asset *B* determined without regard to this section. One-fourth year's depreciation is allowable for asset *C* determined without regard to this section and one-fourth year's depreciation is allowable for asset *C* determined under this section.

Example (5). The taxpayer during his taxable year which begins August 1, 1970 and ends July 31, 1971, places new property in service in a trade or business as follows:

<i>Assets</i>	<i>Placed in service</i>
<i>A</i> -----	Aug. 1, 1970
<i>B</i> -----	Jan. 15, 1971
<i>C</i> -----	June 30, 1971

The taxpayer had used a convention with respect to assets placed in service in prior taxable years whereby assets placed in service during the first half of the year are treated as placed in service on the first day of such year and assets placed in service in the second half of the year are treated as placed in service on the first day of the

following year. If the taxpayer selects the modified half-year convention, one full year's depreciation is allowable for asset *A* determined without regard to this section. Five months depreciation is allowable for asset *B* determined without regard to this section and seven months depreciation is allowable for asset *B* determined under this section. One-half year's depreciation is allowable for asset *C* determined under this section. The taxpayer may not apply the modified half-year convention by assuming all additions occurring the first day of the second quarter of the taxable year since such application is not consistent with the convention applied with respect to assets placed in service in prior taxable years.

Example (6). Assume the same facts as in example (5) except that the taxpayer applies a convention with respect to assets placed in service prior to January 1, 1971, whereby such assets are treated as placed in service at the mid-point of the year. If the taxpayer selects the modified half-year convention and applies such convention by treating all additions as occurring on the first day of the second quarter of the taxable year, one-half year's depreciation is allowable for asset *A* determined without regard to this section, seven months depreciation is allowable for asset *B* determined under this section, and seven months depreciation is allowable for asset *C* determined under this section.

Example (7). (i) Taxpayer *B* reports income on the basis of a taxable year ending March 31. *B* adopts the declining balance method of depreciation using a rate twice the straight line rate (computed without reduction for salvage) with respect to new property, which is first placed in service by *B* in the taxable year ending March 31, 1971, as follows:

<i>Asset</i>	<i>Placed in service</i>	<i>Unadjusted basis</i>
<i>W</i>	May 15, 1970	\$8,000
<i>X</i>	Nov. 1, 1970	3,000
<i>Y</i>	Jan. 20, 1971	4,000
<i>Z</i>	Mar. 10, 1971	16,000

(ii) *B*'s depreciation deduction with respect to assets *W* and *X* for the taxable year ending March 31, 1971, will be determined without regard to this section, since assets *W* and *X* are not eligible property. Assume that *B* adopts for assets *W* and *X* a convention under § 1.167(a)-10 which treats assets placed in service during the first half of the year as placed in service on the first day of such year, and which treats assets placed in service during the second half of the year as placed in service on the first day of the following year. Using this convention, *B* computes a full year's depreciation for asset *W* and no depreciation for asset *X*. Assets *W* and *X* have a guideline life of 10 years and no salvage value. The depreciation allowance for asset *W* is \$1,600 (that is, 20 percent multiplied by basis of \$8,000). No depreciation is allowed for asset *X* in the taxable year ending March 31, 1971.

(iii) Assets *Y* and *Z* are eligible property and *B* makes an election under this section. *B* selects an asset depreciation period of 8 years from an asset depreciation range of 8 to 12 years. *B* adopts the modified half-year convention described in subparagraph (2)(ii) of this paragraph. Thus, assets *Y* and *Z* would be treated as placed in service on October 1, 1970 (that is, the first day of the second half of the taxable year), but for the special limitation in subparagraph (3) of this paragraph. The selection of an 8-year asset depreciation period only applies for the portion of the taxable year after December 31, 1970. Further, no depreciation is allowable for assets *Y* and *Z* for the period prior to Janu-

ary 1, 1971, since *B* selected a convention for assets *W* and *X* which treats assets placed in service during the second half of the year as placed in service on the first day of the following year. The depreciation allowance for the period from January 1, 1971, through March 31, 1971, is computed using a rate based upon the asset depreciation period of 8 years selected by the taxpayer, and the depreciation allowance for assets *Y* and *Z* for such period is \$1,250 (that is, basis of \$20,000, multiplied by 25 percent then multiplied by $\frac{1}{4}$, the portion of the taxable year to which the election under this section applies).

(d) *Special rules for salvage, repairs and retirements*—(1) *Salvage value*—(i) *Definition of gross salvage value*. "Gross salvage" value is the amount which is estimated will be realized upon a sale or other disposition of the property in the vintage account when it is no longer useful in the taxpayer's trade or business or in the production of his income and is to be retired from service, without reduction for the cost of removal, dismantling, demolition or similar operations. If a taxpayer customarily sells or otherwise disposes of property at a time when such property is still in good operating condition, the gross salvage value of such property is the amount expected to be realized upon such sale or disposition, and under certain circumstances, as where such property is customarily sold at a time when it is still relatively new, the gross salvage value may constitute a relatively large proportion of the unadjusted basis of such property.

(ii) *Definition of salvage value*. "Salvage value" means gross salvage value less the amount, if any, by which the gross salvage value is reduced by application of section 167(f). Generally, as provided in section 167(f),

a taxpayer may reduce the amount of gross salvage value of a vintage account by an amount which does not exceed 10 percent of the unadjusted basis of the personal property (as defined in section 167(f)(2) in the account. See paragraph (b)(3)(ii) of this section for requirement of separate vintage accounts for personal property described in section 167(f)(2).

(iii) *Estimation of salvage value.* The salvage value of each vintage account of the taxable year shall be estimated by the taxpayer at the time the election to apply this section is made, upon the basis of all the facts and circumstances existing at the close of the taxable year in which the account is established. The taxpayer shall specify the amount, if any, by which gross salvage value taken into account is reduced by application of section 167(f). See paragraph (f)(2) of this section for requirement that the election specify the estimated salvage value for each vintage account of the taxable year of election. The salvage value estimated by the taxpayer will not be redetermined merely as a result of fluctuations in price levels or as a result of other facts and circumstances occurring after the close of the taxable year of election. Salvage value for a vintage account need not be established or increased as a result of a property improvement as described in subparagraph (2)(vii) of this paragraph. The taxpayer shall maintain records reasonably sufficient to determine facts and circumstances taken into account in estimating salvage value.

(iv) *Salvage as limitation on depreciation.* In no case may a vintage account be depreciated below a reasonable salvage value after taking into account any reduction in gross salvage value permitted by section 167(f).

(v) *Limitation on adjustment of reasonable salvage value.* The salvage

value established by the taxpayer for a vintage account will not be redetermined if it is reasonable. Since the determination of salvage value is a matter of estimation, minimal adjustments will not be made. The salvage value established by the taxpayer will be deemed to be reasonable unless there is sufficient basis in the facts and circumstances existing at the close of the taxable year in which the account is established for a determination of an amount of salvage value for the account which exceeds the salvage value established by the taxpayer for the account by an amount greater than 10 percent of the unadjusted basis of the account at the close of the taxable year in which the account is established. If the salvage value established by the taxpayer for the account is not within the 10 percent range, or if the taxpayer follows the practice of understating his estimates of gross salvage value to take advantage of this subdivision, and if there is a determination of an amount of salvage value for the account which exceeds the salvage value established by the taxpayer for the account, an adjustment will be made by increasing the salvage value established by the taxpayer for the account by an amount equal to the difference between the salvage value as determined and the salvage value established by the taxpayer for the account.

For the purposes of this subdivision, a determination of salvage value shall include all determinations at all levels of audit and appellate proceedings, and as well as all final determinations within the meaning of section 1313(a)(1). This subdivision shall apply to each such determination. (See example (3) of subdivision (vi) of this subparagraph.)

(vi) *Examples.* The principles of this subparagraph may be illustrated by the following examples in which it is

assumed that the taxpayer has not followed a practice of understating his estimates of gross salvage value:

Example (1). Taxpayer *B* elects to apply this section to assets *Y* and *Z*, which are placed in a multiple asset vintage account of 1971 for which the taxpayer selects an asset depreciation period of 8 years. The unadjusted basis of asset *Y* is \$50,000 and the unadjusted basis of asset *Z* is \$30,000. *B* estimates a gross salvage value of \$55,000. The property qualifies under section 167(f)(2) and *B* reduces the amount of salvage taken into account by \$8,000 (that is, 10 percent of \$80,000 under section 167(f)). Thus, *B* establishes a salvage value of \$47,000 for the account. Assume that there is not sufficient basis for determining a salvage value for the account greater than \$52,000 (that is, \$60,000 minus the \$8,000 reduction under section 167(f)). Since the salvage value of \$47,000 established by *B* for the account is within the 10 percent range, it is reasonable. Salvage value for the account will not be redetermined.

Example (2). The facts are the same as in Example (1) except that *B* estimates a gross salvage value of \$50,000 and establishes a salvage value of \$42,000 for the account (that is, \$50,000 minus the \$8,000 reduction under section 167(f)). There is sufficient basis for determining an amount of salvage value greater than \$50,000 (that is, \$58,000 minus the \$8,000 reduction under section 167(f)). The salvage value of \$42,000 established by *B* for the account can be redetermined without regard to the limitation in subdivision (v) of this subparagraph, since it is not within the 10 percent range. Upon audit of *B*'s tax return for a taxable year for which the redetermination would affect the amount of depreciation allowable for the account, salvage value is determined to be \$52,000 after

taking into account the reduction under section 167(f). Salvage value for the account will be adjusted to \$52,000.

Example (3). The facts are the same as in Example (1) except that upon audit of *B*'s tax return for a taxable year the examining officer determines the salvage value to be \$58,000 (that is, \$66,000 minus the \$8,000 reduction under section 167(f)), and proposes to adjust salvage value for the vintage account to \$58,000 which will result in disallowing an amount of depreciation for the taxable year. *B* does not agree with the finding of the examining officer. After receipt of a "30-day letter", *B* waives a district conference and initiates proceedings before the Appellate Division. In consideration of the case by the Appellate Division it is concluded that there is not sufficient basis for determining an amount of salvage value for the account in excess of \$55,000 (that is \$63,000 minus the \$8,000 reduction under section 167(f)). Since the salvage of \$47,000 established by *B* for the account is within the 10 percent range, it is reasonable. Salvage value for the account will not be redetermined.

(2) *Treatment of repairs*—(i) *In general.* Sections 162, 212, and 263 provide general rules for the treatment of certain expenditures for the repair, maintenance, rehabilitation or improvement of property. In general, under those sections, expenditures which substantially prolong the life of an asset, or are made to increase its value or adapt it to a different use are capital expenditures. If an expenditure is treated as a capital expenditure under section 162, 212, or 263, it is subject to the allowance for depreciation. On the other hand, in general, expenditures which do not substantially prolong the life of an asset or materially increase its value or adapt it for a substantially different use may be de-

ducted as an expense in the taxable year in which paid or incurred. Expenditures, or a series of expenditures, may have characteristics both of deductible expenses and capital expenditures, may have characteristics both of deductible expenses and capital expenditures. Other expenditures may be expenditures, as in the case of an "excluded addition" (as defined in subdivision (vi) of this subparagraph). This subparagraph provides a simplified procedure for determining whether expenditures with respect to certain property are to be treated as deductible expenses or capital expenditures.

(ii) *Election of repair allowance.* Subject to the provisions of subdivision (v) of this subparagraph, the taxpayer may elect to apply the asset guideline class repair allowance described in subdivision (iii) of this subparagraph for any taxable year ending after December 31, 1970, for which the taxpayer elects to apply this section.

(iii) *Repair allowance for an asset guideline class.* For a taxable year for which the taxpayer elects to apply this section, the "repair allowance" for an asset guideline class is an amount equal to—

(a) The average of (1) the unadjusted basis of all "repair allowance property" (as described in this subdivision) in the asset guideline class at the beginning of the taxable year, less in the case of such property in a vintage account the unadjusted basis of all such property retired in an ordinary retirement (as described in subparagraph (3)(ii) of this paragraph) in prior taxable years, and (2) the unadjusted basis of all "repair allowance property" in the asset guideline class at the end of the taxable year, less in the case of such property in a vintage account the unadjusted basis of all such property retired in an ordinary retirement during the taxable year, multiplied by—

(b) The repair allowance percentage in effect for the asset guideline class for the taxable year.

The "repair allowance percentages" in effect for taxable years ending before the effective date of the first supplemental repair allowance percentages established pursuant to this section are set forth in Revenue Procedure 71-25. Repair allowance percentages will from time to time be established, supplemented and revised with express reference to this section. These repair allowance percentages will be published in the Internal Revenue Bulletin. The repair allowance percentages in effect on the last day of the taxable year shall apply for the taxable year; except that the repair allowance percentage for a particular taxable year shall not be less than the repair allowance percentage in effect on the first day of such taxable year. The repair allowance percentages for a taxable year shall not be changed to reflect any supplement or revision of the repair allowance percentages after the end of such taxable year. For the purposes of this section, "repair allowance property" means eligible property determined without regard to paragraph (b)(2)(iii) of this section (that is, without regard to whether such property was first placed in service by the taxpayer before or after December 31, 1970).

(iv) *Application of asset guideline class repair allowance.* In accordance with the principles of sections 162, 212, and 263, if the taxpayer pays or incurs any expenditures during the taxable year for the repair, maintenance, rehabilitation or improvement of repair allowance property, the taxpayer must either—

(a) If the taxpayer elects to apply the repair allowance for the asset guideline class, treat an amount of all such expenditures in such taxable

year with respect to all such property in the asset guideline class which does not exceed in total the repair allowance for that asset guideline class as deductible repairs, and treat the excess of all such expenditures with respect to all such property in the asset guideline class in the manner described for a property improvement in subdivision (viii) of this subparagraph, or

(b) If the taxpayer does not elect to apply the repair allowance for the asset guideline class, treat each of such expenditures in such taxable year with respect to all such property in the asset guideline class as either a capital expenditure or as a deductible repair in accordance with the principles of sections 162, 212, and 263 (without regard to (a) of this subdivision), and treat the expenditures which are required to be capitalized under sections 162, 212, and 263 (without regard to (a) of this subdivision) in the manner described for a property improvement in subdivision (viii) of this subparagraph.

For the purposes of (a) and (b) of this subdivision, expenditures for the repair, maintenance, rehabilitation or improvement of property do not include expenditures for an excluded addition. (See subdivision (viii) of this subparagraph for treatment of an excluded addition.)

The taxpayer shall elect each taxable year whether to apply the repair allowance and treat expenditures under (a) of this subdivision, or to treat expenditures under (b) of this subdivision. The treatment of expenditures under this subdivision for a taxable year for all asset guideline classes shall be specified in the tax return filed for the taxable year. The taxpayer may treat expenditures under (a) of this subdivision with respect to property in

one asset guideline class and treat expenditures under (b) of this subdivision with respect to property in some other asset guideline class. In addition, the taxpayer may treat expenditures with respect to property in an asset guideline class under (a) of this subdivision in one taxable year, and treat expenditures with respect to property in that asset guideline class under (b) of this subdivision in another taxable year.

(v) *Limitations on use of repair allowance.* (a) The asset guideline class repair allowance described in subdivision (iii) of this subparagraph shall apply only to expenditures with respect to repair allowance property (as described in subdivision (iii) of this subparagraph) in the asset guideline class. The taxpayer may apply the asset guideline class repair allowance for the taxable year only if the taxpayer maintains books and records sufficient to determine the information reasonably required for its application, including—

(1) the amount and general description of expenditures paid or incurred during the taxable year for the repair, maintenance, rehabilitation or improvement of repair allowance property in the asset guideline class, and

(2) a determination of which expenditures (and the amount of each) with respect to such property are for excluded additions (such as whether the expenditure is for an additional identifiable unit of property, or substantially increases the productivity or capacity of an existing identifiable unit of property or adapts it for a substantially different use).

In general, such books and records shall be sufficient to identify the amount and nature of expenditures with respect to specific items of repair allowance property or groups of similar

properties in the same asset guideline class. However, in the case of expenditures for labor costs and supplies for general maintenance of plant and equipment part of which is repair allowance property and part is not, or part of which is in one asset guideline class and part in another, to the extent books and records are not maintained identifying such expenditures with respect to specific items of property or groups of properties and it is not practicable to do so, the total amount of such expenditures may be allocated by any reasonable method consistently applied.

(b) If for the taxable year the taxpayer claims or is allowed a deduction in accordance with section 263(e) for expenditures with respect to repair allowance property in a particular asset guideline class, the taxpayer may not use the asset guideline class repair allowance described in subdivision (iii) of this subparagraph for such asset guideline class for such taxable year.

(c) (1) If the taxpayer repairs, rehabilitates or improves property for sale or resale to customers, the asset guideline class repair allowance described in subdivision (iii) of this subparagraph shall not apply to expenditures for the repair, maintenance, rehabilitation or improvement of such property, or (2) if a taxpayer follows the practice of acquiring for his own use used property (in need of repair, rehabilitation or improvement to be suitable for the use intended by the taxpayer) and of making expenditures to repair, rehabilitate or improve such property in order to take advantage of this subparagraph, the asset guideline class repair allowance described in subdivision (iii) of this subparagraph shall not apply to such expenditures. In either event, such expenditures shall not be treated as expenditures for the repair, maintenance, rehabilitation or

improvement of property for the purposes of this subparagraph and such property shall not be "repair allowance property" as described in subdivision (iii) of this subparagraph.

(vi) *Definition of excluded addition.* The term "excluded addition" generally means—

(a) an expenditure which substantially increases the productivity or capacity of an existing identifiable unit of property over its productivity or capacity when first acquired by the taxpayer,

(b) an expenditure which modifies an existing identifiable unit of property for a substantially different use, or

(c) an expenditure for an additional identifiable unit of property (as distinguished from an expenditure for replacement of a part in an existing identifiable unit of property which is paid or incurred in connection with the repair, maintenance, rehabilitation or improvement of such property, whether or not such part is also an identifiable unit of property).

For the purposes of (a) of this subdivision, an increase in productivity or capacity is substantial only if the increase is more than 25 percent. Under (c) of this subdivision, in the case of vintage account of five automobiles, each automobile constitutes an identifiable unit of property. An automobile transmission is also an identifiable unit of property. The replacement of an existing transmission in the automobile in connection with the repair, maintenance, or rehabilitation of the automobile is not an excluded addition. The addition of an air conditioner to an automobile is an excluded addition. The replacement of one of the automobiles in the vintage account is an excluded addition since the automobile is not a part in an existing identifiable unit of

property. The principles of this subdivision may be further illustrated by the following example:

Example. For the taxable year, *B* pays or incurs the following expenditures: (a) \$5,000 for general maintenance of repair allowance property (as described in subdivision (iii) of this subparagraph) such as inspection, oiling, machine adjustments, cleaning, and painting; (b) \$175 for replacement of bearings and gears in an existing lathe; (c) \$125 for replacement of an electric starter and certain electrical wiring in an automatic drill press; (d) \$300 for modification of a metal fabricating machine (including replacement of certain parts) which substantially increases its capacity; and (e) \$800 for the replacement of an existing lathe with a new lathe. Expenditures (a) through (c) are expenditures for the repair, maintenance, rehabilitation or improvement of property to which *B* can elect to apply the asset guideline class repair allowance described in subdivision (iii) of this subparagraph. Expenditures (d) and (e) are excluded additions.

(vii) *Definition of property improvement.* The term "property improvement" means—

(a) If the taxpayer treats expenditures for the asset guideline class under subdivision (iv) (a) of this subparagraph, the amount of all expenditures paid or incurred during the taxable year for the repair, maintenance, rehabilitation or improvement of repair allowance property in the asset guideline class, which exceeds the asset guideline class repair allowance for the taxable year; and

(b) If the taxpayer treats expenditures for the asset guideline class under subdivision (iv) (b) of this subparagraph, the amount of each expenditure paid or incurred

during the taxable year for the repair, maintenance, rehabilitation or improvement of repair allowance property which is treated under sections 162, 212, and 263 as a capital expenditure.

The term "property improvement" does not include any expenditure for an excluded addition.

(viii) *Treatment of property improvements and excluded additions.* If for the taxable year there is a property improvement as described in subdivision (vii) of this subparagraph or an excluded addition as described in subdivision (vi) of this subparagraph, the following rules shall apply—

(a) The total amount of any property improvement for the asset guideline class determined under subdivision (vii) (a) of this subparagraph shall be capitalized in a single "special basis vintage account" of the taxable year in accordance with the taxpayer's election to apply this section for the taxable year (applied without regard to paragraph (b) (5) (v) (a) of this section). See subparagraph (3) (vi) of this paragraph for definition and treatment of a "special basis vintage account".

(b) Each property improvement determined under subdivision (vii) (b) of this subparagraph, if it is eligible property, shall be capitalized in a vintage account of the taxable year in accordance with the taxpayer's election to apply this section for the taxable year (applied without regard to paragraph (b) (5) (v) (a) of this section).

(c) Each excluded addition, if it is eligible property, shall be capitalized in a vintage account of the taxable year in accordance with the taxpayer's election to apply this section for the taxable year.

For rule as to date on which a property improvement or an excluded addition

is first placed in service, see paragraph (e) (1) (iii) and (iv) of this section.

(ix) *Examples.* The principles of this subparagraph may be illustrated by the following examples:

Example (1). For the taxable year 1972, *B* elects to apply this section. *B* has repair allowance property (as described in subdivision (iii) of this subparagraph) in asset guideline class 20.2 under Revenue Procedure 71-25 with an average unadjusted basis determined as provided in subdivision (iii) (a) of this subparagraph of \$100,000 and repair allowance property in asset guideline class 24.4 with an average unadjusted basis of \$300,000. The repair allowance percentage for asset guideline class 20.2 is 4.5 percent and for asset guideline class 24.4 is 6.5 percent. The two asset guideline class repair allowances for 1972 are \$4,500 and \$19,500, respectively, determined as follows:

Asset Guideline Class 20.2	
\$100,000 average unadjusted basis	
multiplied by 4.5 percent-----	\$4,500
Asset Guideline Class 24.4	
\$300,000 average unadjusted basis	
multiplied by 6.5 percent-----	\$19,500

Example (2). The facts are the same as in Example (1). During the taxable year 1972, *B* pays or incurs the following expenditures for the repair, maintenance, rehabilitation or improvement of repair allowance property in asset guideline class 20.2.

General maintenance (including primarily labor costs)-----	\$3,000
Replacement of parts in several machines (including labor costs of \$1,650)-----	4,000
	<hr/>
	7,000

In addition, in connection with the rehabilitation and improvement of two other machines *B* pays or incurs \$6,000 (including labor costs of \$2,000) which is treated as an excluded addition because the capacity of the equipment

was substantially increased. For 1972, *B* elects to apply this section and to apply the asset guideline class repair allowance to asset guideline class 20.2. Since the asset guideline class repair allowance is \$4,500, *B* can deduct \$4,500 in accordance with subdivision (iv) (a) of this subparagraph. *B* must capitalize \$2,500 in a special basis vintage account in accordance with subdivisions (vii) (a) and (viii) (a) of this subparagraph. Since the excluded addition is a capital item and is eligible property, *B* must also capitalize \$6,000 in a vintage account in accordance with subdivision (viii) (c) of this subparagraph. *B* selects from the asset depreciation range an asset depreciation period of 17 years for the special basis vintage account. *B* includes the excluded addition in a vintage account of 1972 for which he also selects an asset depreciation period of 17 years.

(3) *Treatment of retirements—(i)*

In general. The rules of this subparagraph specify the treatment of all retirements from vintage accounts. The rules of § 1.167(a)-8 shall not apply to any retirement from a vintage account. In general, an asset in a vintage account is retired when such asset is permanently withdrawn from use in a trade or business or in the production of income by the taxpayer. A retirement may occur as a result of a sale or exchange, by other act of the taxpayer amounting to a permanent disposition of an asset, or by physical abandonment of an asset. A retirement may also occur by transfer of an asset to supplies or scrap. A physical abandonment occurs only if it is reasonably certain that the property will neither be restored to use in the taxpayer's trade or business or in the production of income, nor retrieved for sale, exchange, or other disposition.

(ii) *Definitions of ordinary and extraordinary retirements.* The term "or-

dinary retirement” means any retirement from a vintage account which is not treated as an “extraordinary retirement” under this subdivision. The retirement of an asset from a vintage account in a taxable year is an “extraordinary retirement” if—

(a) The asset is retired as the direct result of fire, storm, shipwreck, or other casualty; or

(b) (1) The asset is retired (other than by transfer to supplies or scrap) in a taxable year as the direct result of a cessation, termination, curtailment, or disposition of a business, manufacturing, or other income producing process, operation, facility or unit, and (2) the unadjusted basis (determined without regard to subdivision (vi) of this subparagraph) of all the assets so retired in such taxable year from such account as a direct result of the event described in (b) (1) of this subdivision exceeds 20 percent of the unadjusted basis of such account immediately prior to such event. For this purpose, all accounts (other than a special basis vintage account as described in subdivision (vi) of this subparagraph) of the same vintage for which the same asset depreciation period has been selected, and from which a retirement as a direct result of such event occurs within the taxable year, shall be treated as a single vintage account.

(iii) *Treatment of ordinary retirements.* No loss shall be recognized upon an ordinary retirement. Gain shall be recognized only to the extent specified in this subparagraph. All proceeds from ordinary retirements shall be added to the depreciation reserve of the vintage account from which the retirement occurs. See subdivision (vi) of this subparagraph for allocation of basis in the case of a special basis vintage account. See subdivision (ix) of this subparagraph for recognition of gain when the depreciation reserve exceeds the unad-

justed basis of the vintage account. The amount of salvage value for a vintage account shall be reduced (but not below zero) as of the beginning of the taxable year by the excess of (a) the depreciation reserve for the account, after adjustment for depreciation allowable for such taxable year and all other adjustments prescribed by this section (other than the adjustment prescribed by subdivision (ix) of this subparagraph), over (b) the unadjusted basis of the account less the amount of salvage value for the account before such reduction. Thus, in the case of a vintage account with an unadjusted basis of \$1,000 and a salvage value of \$100, to the extent that proceeds from ordinary retirements increase the depreciation reserve above \$900, the salvage value is reduced. If the proceeds increase the depreciation reserve for the account to \$1,000, the salvage value is reduced to zero. The unadjusted basis of the asset retired in an ordinary retirement is not removed from the account and the depreciation reserve for the account is not reduced by the depreciation allowable for the retired asset. The previously unrecovered basis of the retired asset will be recovered through the allowance for depreciation with respect to the vintage account. See subdivision (v) of this subparagraph for treatment of ordinary retirements on which gain or loss is not recognized in whole or in part.

(iv) *Treatment of extraordinary retirements.* Unless the transaction is governed by a special nonrecognition section of the Code such as 1031 or 337, gain or loss shall be recognized upon an extraordinary retirement in the taxable year in which such retirement occurs subject to section 1231, section 165 and all other applicable provisions of law such as section 1245. The un-

adjusted basis of the retired asset shall be removed from the unadjusted basis of the vintage account. The depreciation reserve established for the account shall be reduced by the depreciation allowable for the retired asset computed in the manner prescribed in paragraph (c)(1)(v)(b) of this section for determination of the adjusted basis of the asset. See subdivision (ix) of this subparagraph for recognition of gain when the depreciation reserve exceeds the unadjusted basis of the vintage account. See subdivision (iii) of this subparagraph for reduction of salvage value for an account when the depreciation reserve exceeds the unadjusted basis of the account minus salvage value.

(v) *Special rule for certain retirements.* In the case of an ordinary retirement on which gain or loss is in whole or in part not recognized because of a special nonrecognition section of the Code, such as 1031 or 337, the portion of the proceeds on which gain is not recognized shall not be added to the depreciation reserve of the vintage account in accordance with subdivision (iii) of this subparagraph and the unadjusted basis of the asset shall be removed from the unadjusted basis of the vintage account. The depreciation reserve established for the account shall be reduced by the depreciation allowable for the retired asset computed in the manner prescribed in paragraph (c)(1)(v)(b) of this section for determination of the adjusted basis of the asset.

(vi) *Treatment of special basis vintage accounts.* A "special basis vintage account" is a vintage account for an amount of property improvement determined under subparagraph (2)(vii)(a) of this paragraph. In general, reference in this section to a "vintage account" shall include a special basis

vintage account. The unadjusted basis of a special basis vintage account shall be recovered through the allowance for depreciation in accordance with this section over the asset depreciation period selected for the account. Except as provided in this subdivision, the unadjusted basis, adjusted basis and reserve for depreciation of such account shall not be allocated to any specific asset in the asset guideline class, and the provisions of this subparagraph shall not apply to such account. However, in the event of a sale, exchange or other disposition of "repair allowance property" (as described in subparagraph (2)(iii) of this paragraph) in an extraordinary retirement as described in subdivision (ii) of this subparagraph (or if the asset is not in a vintage account, in an abnormal retirement as described in § 1.167(a)-8), the taxpayer may, if consistently applied to all such retirements in the taxable year and adequately identified in the taxpayer's books and records, elect to allocate the adjusted basis (as of the end of the taxable year) of all special basis vintage accounts for the asset guideline class to each such retired asset in the proportion that the adjusted basis of the retired asset (as of the beginning of the taxable year) bears to the adjusted basis of all repair allowance property in the asset guideline class at the beginning of the taxable year. The election to allocate basis in accordance with this subdivision shall be made on the tax return filed for the taxable year. The principles of this subdivision may be illustrated by the following example:

Example. In addition to other property, the taxpayer has machines *A*, *B*, and *C*, all in the same asset guideline class and each with an adjusted basis on January 1, 1977, of \$10,000. The adjusted basis on January 1, 1977, of

all repair allowance property (as described in subparagraph (2)(iii) of this paragraph) in the asset guideline class is \$90,000. The machines are sold in an extraordinary retirement in

1977. The taxpayer is entitled to and does elect to allocate basis in accordance with this subdivision. There is also a 1972 special basis vintage account for the asset guideline class, as follows:

	<i>Un- adjusted basis</i>	<i>Reserve for depre- ciation</i>	<i>12-31-77 adjusted basis</i>
1972 special basis vintage account, for which the taxpayer selected an asset depreciation period of 10 years, adopted the straight line method, and used the half-year convention.....	\$2,000	\$1,100	\$900

By application of this subdivision, the adjusted basis of machines *A*, *B*, and *C* is increased to \$10,100 each (that is, $\frac{\$10,000}{\$90,000} \times \$900 = \100). The unadjusted basis, reserve for depreciation and adjusted basis of the special basis vintage account are reduced, respectively, by $\frac{1}{3}$ (that is, $\frac{\$300}{\$900} = \frac{1}{3}$) in order to reflect the allocation of basis to the special basis vintage account.

(vii) *Reduction in the salvage value of a vintage account.* (a) A taxpayer may apply this section without reducing the salvage value for a vintage account in accordance with this subdivision or in accordance with subdivision (viii) of this subparagraph (relating to transfers to supplies or scrap). See subdivision (iii) of this subparagraph for reduction of salvage value in certain circumstances in the amount of proceeds from ordinary retirements. However, the taxpayer may in lieu thereof follow the consistent practice of reducing, as retirements occur, the salvage value for a vintage account by the amount of salvage value attributable to the retired asset, or the taxpayer may consistently follow the practice of so reducing the salvage

value for a vintage account as extraordinary retirements occur while not reducing the salvage value for the account as ordinary retirements occur. If the taxpayer does not reduce the salvage value for a vintage account as retirements occur, the taxpayer may be entitled to a deduction in the taxable year in which the last asset is retired from the account in accordance with subdivision (ix)(b) of this subparagraph.

(b) For purposes of this subdivision, the portion of the salvage value for a vintage account attributable to a retired asset may be determined by multiplying the salvage value for the account by a fraction, the numerator of which is the unadjusted basis of the retired asset and the denominator of which is the unadjusted basis of the account, or by any other reasonable method which is consistently applied.

(c) If the taxpayer reduces the salvage value for a vintage account as ordinary retirements occur, in the case of an ordinary retirement the taxpayer may either: (1) follow the consistent practice of reducing the salvage value for the account by the amount of salvage value attributable to the retired asset and not adding the same amount

to the depreciation reserve for the account, in which case (if the asset is retired by transfer to supplies or scrap) the basis in the supplies or scrap account of the retired asset will be zero, or (2) follow the consistent practice of reducing the salvage value for the account by the amount of salvage value attributable to the retired asset and adding the same amount to the depreciation reserve for the account (up to an amount which does not increase the depreciation reserve to an amount in excess of the unadjusted basis of the account) in which case (if the asset is retired by transfer to supplies or scrap) the basis in the supplies or scrap account of the retired asset will be the amount added to the depreciation reserve for the account. Thus, for example, in the case of an ordinary retirement by transfer of an asset to supplies or scrap, the basis of the asset in the supplies or scrap account would either be zero or the amount added to the depreciation reserve of the vintage account from which the retirement occurred. When the depreciation reserve for the account equals the unadjusted basis of the account no further adjustment to salvage value for the account will be made. See subdivision (viii) (c) of this subparagraph for special optional rule for determining the basis of an asset transferred to supplies or scrap.

(d) In the event of a removal of property from a vintage account in accordance with paragraph (b) (5) (v) (b) or (vi) or paragraph (b) (6) (viii) of this section, the salvage value for the account may be reduced by the amount of salvage value attributable to the asset removed determined as provided in (b) of this subdivision.

(viii) *Adjustments for transfer to supplies or scrap.* If the taxpayer fol-

lows the consistent practice of reducing, as ordinary retirements occur, the salvage value for a vintage account in accordance with subdivision (vii) of this subparagraph, the taxpayer may (in lieu of the method described in subdivision (vii) (b) and (c) of this subparagraph for determining the basis of the retired asset in the supplies or scrap account) follow the consistent practice of determining the basis (in the supplies or scrap account) of assets retired in an ordinary retirement by transfer to supplies or scrap, in the following manner—

(a) The taxpayer may determine the value of the asset (not to exceed its unadjusted basis) by any reasonable method consistently applied (such as average cost, conditioned cost, or fair market value) if such method is adequately identified in the taxpayer's books and records.

(b) The salvage value attributable to the asset determined in accordance with subdivision (vii) (b) of this subparagraph shall be subtracted from the salvage value for the account (to the extent thereof) and the greater of (1) the amount subtracted from the salvage value for the vintage account or (2) the value of the asset determined in accordance with (a) of this subdivision, shall be added to the reserve for depreciation of the vintage account.

(c) The amount added to the reserve for depreciation of the vintage account in accordance with (b) of this subdivision shall be treated as the basis of the retired asset in the supplies or scrap account.

If the taxpayer makes the adjustments in accordance with this subdivision, the reserve for depreciation of the vintage account may exceed the unadjusted basis of the account, and in that event

gain will be recognized in accordance with subdivision (ix) of this subparagraph.

(ix) *Recognition of gain or loss in certain situations.* (a) If at the end of any taxable year after adjustment for depreciation allowable for such taxable year and all other adjustments prescribed by this section, the depreciation reserve established for a vintage account exceeds the unadjusted basis of the account, the entire amount of such excess shall be recognized as gain in such taxable year. Such gain shall—

(1) Constitute gain to which section 1245 applies to the extent that it does not exceed the total amount of depreciation allowances in the depreciation reserve for all years at the end of such taxable year, reduced by gain recognized pursuant to this subdivision with respect to the account previously treated as gain to which section 1245 applies, and

(2) Constitute gain to which section 1231 applies to the extent that it exceeds such total amount as so reduced.

In such event, the depreciation reserve shall be reduced by the amount of gain recognized, so that after such reduction the amount of the depreciation reserve is equal to the unadjusted basis of the account. Thus, for example, in the case of a vintage account with an unadjusted basis of \$1,000 and a depreciation reserve of \$700 (of which \$600 represents depreciation allowances), if \$500 is realized during the taxable year from ordinary retirements of assets from the account, the reserve is increased to \$1,200, gain is recognized to the extent of \$200 (the amount by which the depreciation reserve before further adjustment exceeds \$1,000) and the depreciation reserve is then decreased to \$1,000. The \$200 of gain constitutes gain to which section 1245

applies. If the amount realized from ordinary retirements during the year had been \$1,100 instead of \$500, the gain of \$800 would have consisted of \$600 of gain to which section 1245 applies and \$200 of gain to which section 1231 applies.

(b) If at the time the last asset in a particular vintage account is retired the unadjusted basis of the account exceeds the depreciation reserve for the account (after all adjustments prescribed by this section), the entire amount of such excess shall be recognized in such taxable year as a loss under section 165 or as a deduction for depreciation under section 167. If the retirement of such asset occurs by sale or exchange on which gain or loss is recognized, the amount of such excess shall constitute a loss subject to section 1231. Upon retirement of the last asset in a vintage account, the account shall terminate and no longer be an account to which this section applies.

(x) *Dismantling cost.* The cost of dismantling, demolishing, or removing an asset in the process of a retirement from the vintage account shall be treated as an expense deductible in the year paid or incurred, and such cost shall not be subtracted from the depreciation reserve for the account.

(4) *Examples.* The principles of this paragraph may be illustrated by the following examples:

Example (1). (a) Taxpayer *A* has a multiple asset vintage account with an unadjusted basis of \$1,000. All the assets were first placed in service by *A* on January 15, 1971. This account contains all of *A*'s assets in a single asset guideline class. *A* elects to apply this section for 1971 and adopts the modified half-year convention. *A* estimates a salvage value for the account of \$100 and this estimate is determined to be reasonable. (See subparagraph (1)(v) of this paragraph for limitation on ad-

justment of reasonable salvage value.) *A* adopts the straight line method of depreciation with respect to the account and selects a 10-year asset depreciation period. *A* does not follow a practice of reducing the salvage value for the account in the amount of salvage value attributable to each retired asset in accordance with subparagraph (3) (vii) of this paragraph. The depreciation allowance for each of the first 4 years is \$100, that is $\frac{1}{10}$ multiplied by the unadjusted basis of \$1,000, without reduction for salvage.

(b) In the fifth year of the asset depreciation period, three assets are sold in an ordinary retirement for \$300. Under paragraph (c) (1) (ii) of this section and subparagraph (3) (iii) of this paragraph, the proceeds of the retirement are added to the depreciation reserve as of the beginning of the fifth year. Accordingly, the reserve as of the beginning of the fifth year is \$700, that is, \$400 of depreciation as of the beginning of the year plus \$300 proceeds from ordinary retirements. The depreciation allowance for the fifth year is \$100, that is $\frac{1}{10}$ multiplied by the unadjusted basis of \$1,000, without reduction for salvage. Accordingly, the depreciation reserve at the end of the fifth year is \$800.

(c) In the sixth year, asset *X* is sold in an extraordinary retirement for \$30 and gain or loss is recognized. Under the first-year convention used by the taxpayer, the unadjusted basis of *X*, \$300, is removed from the unadjusted basis of the vintage account as of the beginning of the sixth year and the depreciation reserve as of the beginning of such year is reduced to \$650 by removing the depreciation applicable to asset *X*, \$150 (see subparagraph (3) (iv) of this paragraph). Since the depreciation reserve (\$650) exceeds the unadjusted basis of the account (\$700) minus salvage value (\$100) by \$50, under subparagraph (3) (iii) of this

paragraph, salvage value is reduced by \$50. No depreciation is allowable for the sixth year.

(d) In the seventh year, an asset is sold in an ordinary retirement for \$110. This would increase the reserve as of the beginning of the seventh year to \$760 and under subparagraph (3) (iii) of this paragraph the salvage value is reduced to zero. Under subparagraph (3) (ix) (a) of this paragraph the depreciation reserve is then decreased to \$700 (the unadjusted basis of the account) and \$60 is reported as gain, without regard to the adjusted basis of the asset. No depreciation is allowable for the seventh year since the depreciation reserve (\$700) equals the unadjusted basis of the account (\$700).

(e) (1) In the eighth year, *A* elects to apply this section and to treat expenditures during the year for repair, maintenance, rehabilitation or improvement under subparagraph (2) (iii) and (iv) (a) of this paragraph (the "guideline class repair allowance"). This results in the treatment of \$300 as a property improvement for the asset guideline class. (See subparagraph (2) (vii) of this paragraph for definition of a property improvement.) The property improvement is capitalized in a special basis vintage account of the eighth taxable year (see paragraph (2) (viii) (a) of this paragraph). *A* selects an asset depreciation period of 10 years and adopts the straight line method for the special basis vintage account. *A* adopts the modified half-year convention for the eighth year.

(2) In the eighth year, *A* sells asset *Y* in an ordinary retirement for \$175. Under paragraph (c) (1) (ii) of this section and subparagraph (3) (iii) of this paragraph, \$175 is added to the depreciation reserve for the account as of the beginning of the taxable year. Since the depreciation reserve for the account (\$875) exceeds the unad-

adjusted basis of the account (\$700) by \$175, that amount of gain is recognized under subparagraph (3)(ix) of this paragraph. Upon recognition of gain in the amount of \$175, the depreciation reserve for the account is reduced to \$700.

(3) No depreciation is allowable in the eighth year for the vintage account since the depreciation reserve (\$700) equals the unadjusted basis of the account (\$700). The depreciation allowable in the eighth year for the special basis vintage account is \$30, that is, unadjusted basis of \$300, multiplied by $\frac{1}{10}$, the asset depreciation period selected for the special basis vintage account, but limited to \$22.50 under the modified half-year convention. (See paragraph (c)(1)(iv) of this section for treatment of \$150 of the property improvement as first placed in service in the first half of the taxable year and \$150 of the property improvement as first placed in service in the last half of the taxable year.)

Example (2). Taxpayer *B* has a multiple asset vintage account of 1971 with an unadjusted basis of \$100,000. *B* selects from the asset depreciation range an asset depreciation period of 10 years and adopts the straight line method of depreciation and the modified half-year convention. *B* establishes a salvage value for the account of \$10,000. All the assets in the account are first placed in service on January 15, 1971. *B* follows the practice of reducing salvage value for the account as ordinary retirements occur in accordance with subparagraph (3)(vii) of this paragraph, but does not follow the optional practice of determining the basis of assets transferred to supplies or scrap in accordance with subparagraph (3)(viii) of this paragraph. No retirements occur during the first five years. The depreciation reserve at the beginning of the sixth year is \$50,000.

In the sixth year an asset with an unadjusted basis of \$20,000 is transferred to supplies in an ordinary retirement. By application of subparagraph (3)(vii)(b) of this paragraph (*B*) determines the reduction in salvage value for the account attributable to such asset

to be \$2,000 (that is, $\frac{\$20,000}{100,000} \times \$10,000 = \$2,000$). *B* reduces the salvage value for the account by \$2,000 and adds \$2,000 to the depreciation reserve for the account. The basis of the retired asset in the supplies account is \$2,000. The depreciation allowable for the account for the sixth year is \$10,000. The depreciation reserve for the account at the beginning of the seventh year is \$62,000. At the mid-point of the seventh year all the remaining assets in the account are sold in an ordinary retirement for \$20,000, which is added to the depreciation reserve as of the beginning of the seventh year, thus increasing the reserve to \$82,000. The \$5,000 depreciation allowable for the account for the seventh year (one-half of a full year's depreciation of \$10,000) increases the depreciation reserve to \$87,000. Under subparagraph (3)(ix)(b) of this paragraph, a loss of \$13,000 subject to section 1231 is realized in the seventh year (that is, the excess of the unadjusted basis of \$100,000 over the depreciation reserve of \$87,000). No depreciation is allowable for the account after the mid-point of the seventh year since all the assets are retired and the account has terminated.

(c) *Accounting for eligible property*—(1) *Definition of first placed in service.* (i) *In general.* The term “first placed in service” refers to the time the property is first placed in service by the taxpayer, not to the first time the property is placed in service. Property is “first placed in service” when first placed in a condition or state of readi-

ness and availability for a specifically assigned function, whether in the taxpayer's trade or business, in the production of income, in a tax-exempt activity, or in a personal activity. The provisions of paragraph (d)(1)(ii) and (d)(2) of § 1.46-3 shall apply for the purpose of determining the date on which property is first placed in service. See subdivision (ii) of this subparagraph for special rule for certain replacement parts. The date on which depreciation begins under a convention used by the taxpayer or under a particular method of depreciation, such as the unit of production method or the retirement method, shall not determine the date on which the property is first placed in service. See paragraph (c)(2) of this section for application of a first-year convention to determine the allowance for depreciation of property in a vintage account.

(ii) *Certain replacement parts.* Property (such as replacement parts) the cost or other basis of which is deducted as a repair expense in accordance with the asset guideline repair allowance described in paragraph (d)(2)(iii) of this section shall not be treated as placed in service.

(iii) *Property improvements and excluded additions.* A property improvement determined under paragraph (d)(2)(vii)(b) of this section, and an excluded addition (other than an additional identifiable unit of property which is an excluded addition described in paragraph (d)(2)(vi)(c) of this section) is first placed in service when its cost is paid or incurred. See subdivision (i) of this subparagraph for general rule which applies to an excluded addition described in paragraph (d)(2)(vi)(c) of this section.

(iv) *Certain property improvements.* In the case of an amount of property improvement determined under paragraph (d)(2)(vii)(a) of this section,

one-half of such amount is first placed in service in the first half of the taxable year in which the cost is paid or incurred and one-half is first placed in service in the last half of such taxable year.

(v) *Special rules for clearing accounts.* In the case of public utilities which consistently account for certain property through "clearing accounts", the date on which such property is first placed in service shall be determined in accordance with rules to be prescribed by the Commissioner.

(2) *Special rules for transferred property.* If eligible property is first placed in service by the taxpayer during a taxable year of election, and the property is disposed of before the end of the taxable year, the election for such taxable year shall include such property unless such property is excluded in accordance with paragraph (b)(5)(iii), (iv), or (v) of this section.

(3) *Special rules in the case of certain transfers—*(i) *Transaction to which section 381(a) applies.* If the distributor or transferor corporation (including any distributor or transferor corporation of any distributor or transferor corporation) has made an election to apply this section to eligible property transferred in a transaction to which section 381(a) applies, the acquiring corporation is treated as if it were the distributor or transferor corporation with respect to such property. The acquiring corporation must segregate such eligible property (to which the distributor or transferor corporation elected to apply this section) into vintage accounts as nearly coextensive as possible with the vintage accounts created by the distributor or transferor corporation identified by reference to the year the property was first placed in service by the distributor or transferor corporation. The asset depreciation period for each vin-

tage account selected by the distributor or transferor corporation from the asset depreciation range must be used by the acquiring corporation. The method of depreciation adopted by the distributor or transferor corporation, shall be used by the acquiring corporation unless such corporation obtains the consent of the Commissioner to use another method of depreciation in accordance with paragraph (e) of § 1.446-1 or changes the method of depreciation under paragraph (b) of § 1.167(e)-1 or under paragraph (c) (1)(iii) of this section. Thus, the acquiring corporation may apply this section to the property so acquired only if the distributor or transferor corporation elected to apply this section to such property.

(ii) *Partnerships, trusts, estates, donees, and corporations.* Except as provided in subdivision (i) of this subparagraph with respect to transactions to which section 381(a) applies, if eligible property is placed in service by an individual, trust, estate, partnership or corporation, the election to apply this section shall be made by the individual, trust, estate, partnership, or corporation placing such property in service. For example, if a partnership places in service property contributed to the partnership by a partner, the partnership may elect to apply this section to such property. If the partnership does not make the election, this section will not apply to such property. See paragraph (b)(7) of this section for special rule for certain property where there is a mere change in the form of conducting a trade or business.

(iii) *Leased property.* The asset depreciation range and the asset depreciation period for eligible property subject to a lease shall be determined without regard to the period for which such property is leased, including any

extensions or renewals of such period. See paragraph (b)(5)(v) of this section for exclusion of property amortized under paragraph (b) of § 1.162-11 from an election to apply this section. In the case of a lessor of property, unless there is an asset guideline class in effect for lessors of such property, the asset guideline class for such property shall be determined by reference to the activity in which such property is primarily used by the lessee. See paragraph (b)(4)(iii)(b) of this section for general rule for classification of property according to primary use.

(f) *Election with respect to eligible property*—(1) *Time and manner of election.* (i) *In general.* An election to apply this section to eligible property shall be made with the income tax return filed for the taxable year in which the property is first placed in service (see paragraph (e)(1) of this section) by the taxpayer. An election to compute the allowance for depreciation under this section is a method of accounting but the consent of the Commissioner will be deemed granted to make an annual election. For election by a partnership see section 703(b) and paragraph (e)(3)(ii) of this section. If the taxpayer does not file a timely return (taking into account extensions of the time for filing) for the taxable year in which the property is first placed in service, the election shall be filed at the time the taxpayer files his first return for that year. The election may be made with an amended return only if such amended return is filed no later than the later of (a) the time prescribed by law (including extensions thereof) for filing the return for the taxable year of election, or (b) September 20, 1971. If an election is not made within the time and in the manner prescribed in this paragraph,

no election may be made for such taxable year (by the filing of an amended return or in any other manner) with respect to any eligible property placed in service in the taxable year.

(ii) *Other elections under the section.* All other elections under this section may be made only within the time and in the manner prescribed by subdivision (i) of this subparagraph with respect to an election to apply this section.

(2) *Information required.* The election under this section must specify:

(i) That the taxpayer makes such election and consents to, and agrees to apply, all the provisions of this section;

(ii) The asset guideline class for each vintage account of the taxable year;

(iii) The asset depreciation period selected by the taxpayer for each vintage account;

(iv) The first-year convention adopted by the taxpayer for the taxable year of election and (if the taxpayer applies the modified half-year convention by taking a full year's depreciation on property first placed in service in the first half of the taxable year), the total cost or other basis of all eligible property first placed in service in the first half of the taxable year and the total cost or other basis of all eligible property first placed in service in the last half of the taxable year;

(v) The unadjusted basis and salvage value for each vintage account, and if such salvage value has been determined by application of section 167(f), the amount by which gross salvage value was decreased under section 167(f);

(vi) Whether the special 10 percent used property rule described in paragraph (b)(5)(iii) of this section has been applied to exclude used property from the election and, if so,

the unadjusted basis of the used property first placed in service during the taxable year;

(vii) Each asset guideline class for which the taxpayer elects to apply the asset guideline class repair allowance described in paragraph (d)(2)(iii) of this section, the amount of property improvement for each such class determined under paragraph (d)(2)(vii)(a) of this section, and whether or not the taxpayer elects for the taxable year to allocate the unadjusted basis of a special basis vintage account for the taxable year in accordance with paragraph (d)(3)(vi) of this section;

(viii) A reasonable description of any eligible property for which the taxpayer was not required or permitted to make an election because of the special rules of paragraph (b)(5)(v) or (6) or paragraph (e)(3)(i) of this section;

(ix) A reasonable description of all "section 38 property" excluded under paragraph (b)(5)(iv) of this section from the election to apply this section; and

(x) Such other information as may reasonably be required. (See paragraph (b)(4)(iii)(a) of this section for special election by certain public utilities.)

Forms will be provided for submission of the information required and an election to apply this section will not be rendered invalid under this subparagraph so long as there is substantial compliance with the requirements of this subparagraph.

(3) *Irrevocable election.* An election to apply this section to eligible property for any taxable year may not be revoked or changed after the time for filing the election prescribed under subparagraph (1) of this paragraph has expired. No other election under

this section may be revoked or changed after such time unless expressly provided for under this section. (See paragraph (b)(5)(v)(b) of this section for special rule.)

(4) *Special condition to election to apply this section.* (i) *In general.* The taxpayer may not elect to apply this section for a taxable year unless he files, within the time prescribed in subparagraph (1)(i) of this paragraph for an election to apply this section, the information required by subdivision (ii) of this subparagraph, in the form and manner prescribed by the Commissioner.

(ii) *Special information required.* The taxpayer shall file the following information with respect to each asset guideline class for the taxable year for which the taxpayer elects to apply this section—

(a) The total unadjusted basis of all assets retired during the taxable year from each vintage account of each asset guideline class, and the proceeds realized during the taxable year from the retirement of such assets;

(b) A general description, in reasonable asset groupings, of all assets retired from each vintage account of each asset guideline class during the taxable year;

(c) The vintage (that is, the taxable year in which established) of each vintage account from which assets were retired during the taxable year, associated with the information required in (a) and (b) of this subdivision so as to identify the age of the assets retired;

(d) A reasonable description of the reasons for and manner of the retirement of the assets, in reasonable asset groupings in accordance with (b) of this subdivision (that is, by sale, exchange, casualty, abandonment, or transfer to scrap);

(e) Such reasonable information with respect to expenditures for the repair, maintenance, rehabilitation or improvement of assets as shall be prescribed by the Commissioner; and

(f) Such other information required by subparagraph (2) of this paragraph as may be prescribed by the Commissioner.

A retirement of an asset by transfer to a supplies account for reuse shall not be included in the information required by this subparagraph. Forms will be provided for submission of the information required and an election to apply this section will not be rendered invalid under this subparagraph so long as there is substantial compliance with the requirements of this subparagraph.

(g) *Relationship to other provisions*—(1) *Useful life.* An election to apply this section to eligible property constitutes an agreement under section 167(d) and this section to treat the period selected by the taxpayer for each vintage account as the useful life of the property in such account for all purposes of the Code, including sections 46, 47, 48, 57, 163(d), 167(c), 167(f)(2), 179, 312(m), 514(a), and 4940(c). For example, since section 167(c) requires a useful life of at least 3 years and the asset depreciation period selected is treated as the useful life for purposes of section 167(c), the taxpayer may adopt a method of depreciation described in section 167(b)(2) or (3) for an account only if the asset depreciation period selected for the account is at least 3 years.

(2) *Section 167(d) agreements.* If the taxpayer has, prior to January 1, 1971, entered into a section 167(d) agreement which applies to any-eligible property, the taxpayer will be permitted to withdraw the eligible property from the agreement provided that

an election is made to apply this section to such property. The statement of intent to withdraw eligible property from such an agreement must be made in an election filed for the taxable year in which the property is first placed in service. The withdrawal, in accordance with this subparagraph, of any eligible property from a section 167(d) agreement shall not affect any other property covered by such an agreement.

(3) *Relationship to the straight line method*—(i) *In general.* For purposes of determining the amount of depreciation which would be allowable under the straight line method of depreciation, such amount shall be computed with respect to any property in a vintage account using the straight line method in the manner described in paragraph (c)(1)(i) of this section and a rate based upon the period for the vintage account selected from the asset depreciation range. Thus, for example, section 57(a)(3) requires a taxpayer to compute an amount using the straight line method of depreciation if the taxpayer uses an accelerated method of depreciation. For purposes of section 57(a)(3), the amount for property in a vintage account shall be computed using the asset depreciation period for the vintage account selected from the asset depreciation range. In the case of property to which the taxpayer does not elect to apply this section, such amount computed by using the straight line method shall be determined under § 1.167(b)-1 without regard to this section.

(ii) *Examples.* The principles of this subparagraph may be illustrated by the following examples:

Example (1). (a) Corporation *X* places a new asset in service to which it elects to apply this section. The cost of the asset is \$200,000 and the estimated salvage value is zero. The taxpayer selects 9 years from the appli-

cable asset depreciation range of 8 to 12 years. Corporation *X* adopts the double declining balance method of depreciation and thus the rate of depreciation is 22.2 percent (twice the applicable straight line rate). The depreciation allowance in the first year would be \$44,400, that is, 22.2 percent of \$200,000.

(b) Assume that the provisions of section 57(a)(3) apply to the property. The amount of the tax preference would be \$22,200, that is, the excess of the depreciation allowed under this section (\$44,400) over the depreciation which would have been allowable if the taxpayer had used the period selected from the asset depreciation range and the straight line rate (\$22,200).

Example (2). (a) The facts are the same as in example (1) except that Corporation *X* does not elect to apply this section. The depreciation allowance is based on a guideline life of 10 years and thus the rate under the double declining balance method is 20 percent. The depreciation allowance is \$40,000, that is, \$200,000 multiplied by 20 percent.

(b) Assume that the provisions of section 57(a)(3) apply to the property. The amount of the tax preference under that section would be \$20,000, that is, the excess of the amount allowed under the double declining balance method, as determined in (a) of this example, \$40,000, over the amount which would have been allowable if the taxpayer had used the straight line method, \$20,000.

PAR. 2. The following new section is added immediately after § 1.167(1)-4, to read as follows:

§ 1.167(1)-5 Public utility property; election to use asset depreciation range system.

(a) *Application of section 167(l) to certain property subject to asset depre-*

ciation range system. If the taxpayer elects to compute depreciation under the asset depreciation range system described in § 1.167(a)-11 with respect to certain public utility property placed in service after December 31, 1970, see § 1.167(a)-11(b) (6).

(This Treasury decision is issued under the authority contained in section 167 of the Internal Revenue Code of 1954 (26 U.S.C. 167) and section 7805

of the Internal Revenue Code of 1954 (26 U.S.C. 7805).)

RANDOLPH W. THROWER,

Commissioner of Internal Revenue.

Approved June 21, 1971.

EDWIN S. COHEN,

Assistant Secretary

of the Treasury.

(Filed by the Office of the Federal Register on June 22, 1971, 11:00 a.m., and published in the issue of the Federal Register for June 23, 1971, 36 F.R. 11924.)

DEPARTMENT OF THE TREASURY
Internal Revenue Service

Office of Industrial Economics
Functions

This material amends functional statement 1113.8 and adds news functional statement 1113.85 to the statement on organization and functions published at 36 F. R. 849-890. This amendment establishes the Office of Industrial Economics in the Office of the Assistant Commissioner (Planning and Research).

RANDOLPH W. THROWER
Commissioner of Internal Revenue

Jun 21 1971

1113.8 OFFICE OF ASSISTANT COMMISSIONER (PLANNING AND RESEARCH)

The Assistant Commissioner (Planning and Research) acts as the principal assistant to the Commissioner and the Deputy Commissioner in the development and administration of the Program and Financial Plan, related objectives and policies, and in the analysis of all Service programs for the purpose of promoting maximum effectiveness in the administration of the Internal Revenue Code with the most efficient and economical expenditure of resources; and is responsible for research, statistics, and systems development. The Assistant Commissioner (Planning and Research) represents the Commissioner on these matters in relations with the Treasury Department, the Congress, other Government agencies and outside organizations. He discharges these primary responsibilities in cooperation with the appropriate Assistant Commissioners (or other principal officials), each of whom exercises related responsibilities within his own functional area. The Assistant Commissioner (Planning and Research) is responsible for and supervises the activities of the Planning and Analysis Division, Research Division, Statistics Division, Systems Development Division, and the Office of Industrial Economics.

1113.85 Office of Industrial Economics

Provides taxpayers and the Government with timely and up-to-date asset classes, forecasts of useful economic lives for such classes, and current repair allowances as part of the Asset Depreciation Range system by accomplishing the following functions: Collects and analyzes data on various asset classes, periods of use and factors of obsolescence and repair and maintenance practices in accordance with the vintage account procedure under the ADR system. Utilizing a variety of data gathering methods, such as economic reports, econometric models, and statistical sampling, compiles information or industrial experience on utilization of depreciable plant and equipment, salvage value, and replacement practices. Receives data and proposed changes in asset classes, depreciation periods, and repair allowances submitted by taxpayers and other knowledgeable sources. Analyzes and evaluates these data as a basis for recommending changes in the ADR system. Analyses are performed by a specialized staff of economists and engineers and involve rather complex issues, including things such as forecasting new technological developments and modes of operation in the various technological fields in the future. Effective liaison is maintained with the Commerce Department's Bureau of the Census and Office of Business Economics and similar offices in other industrialized nations. Closely monitors the operation of the ADR system in tax administration and recommends changes based on its staff observations, as well as reports from field revenue agents. Recommendations are of an administrative, regulatory, or legislative nature. Analyses of data and resultant recommendations are also made available for other elements of IRS for better and more efficient tax administration.

Asset guideline classes, guideline periods, depreciation ranges, and guideline class repair allowance percentages relating to the Asset Depreciation Range System for depreciation of certain classes of assets placed in service after December 31, 1970.

SECTION 1. PURPOSE.

The purpose of this Revenue Procedure is to set forth the asset guideline classes, asset guideline periods and asset depreciation ranges referred to in sections 1.167 (a)-11 (b)(4) of the Income Tax Regulations for the Asset Depreciation Range System which taxpayers may elect for certain assets first placed in service by the taxpayer after December 31, 1970. In addition, this Revenue Procedure sets forth the asset guideline class repair allowance percentages referred to in section 1.167 (a)-11 (d) (2) of the regulations which may be used by electing taxpayers in determining the treatment under sec-

tions 162, 212, and 263 of expenditures paid or incurred in connection with the repair, maintenance, rehabilitation or improvement of certain property described in section 1.167 (a)-11 (d) (2) (iii) of the regulations. Without regard to whether the description of assets in an asset guideline class includes other property, the taxpayer may elect, in accordance with the regulations, to apply the asset guideline periods and asset depreciation ranges only to "eligible property" as defined in section 1.167 (a)-11(b)(2) of the regulations, and to apply the asset guideline class repair allowance percentages only to "repair allowance property" as defined in section 1.167 (a)-11 (d) (2) (iii) of the Income Tax Regulations.

SEC. 2. ASSET GUIDELINE CLASSES AND PERIODS, ASSET DEPRECIATION RANGES, AND ANNUAL ASSET GUIDELINE REPAIR ALLOWANCE PERCENTAGES.

The asset guideline classes, asset guideline periods, asset depreciation ranges, and asset guideline repair allowance percentages have been established as set forth below.

¹ Also released as Technical Information Release 1088, dated June 22, 1971.

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
00.0	DEPRECIABLE ASSETS USED IN ALL BUSINESS ACTIVITIES, EXCEPT AS NOTED:				
00.1	Office furniture, fixtures, machines, and equipment: Includes furniture and fixtures which are not a structural component of the building, and ma- chines and equipment used in the preparation of papers or data. In- cludes such assets as desks, files, safes, typewriters, accounting, calculating and data processing machines, com- munications, duplicating and copying equipment.....	8	10	12	7.5
00.2	Transportation equipment:				
00.21	Aircraft (airframes and engines) except aircraft of air transport companies.....	5	6	7	14.0
00.22	Automobiles, taxis.....	2.5	3	3.5	16.5
00.23	Buses.....	7	9	11.0	11.5
00.24	General purpose trucks, including concrete ready-mix trucks and ore trucks for use over-the-road:				
00.241	Light (actual unloaded weight less than 13,000 pounds)....	3	4	5	16.5
00.242	Heavy (actual unloaded weight 13,000 pounds or more).....	5	6	7	10.0
00.25	Railroad cars and locomotives, ex- cept those owned by railroad transportation companies.....	12	15	18	8.0
00.26	Tractor units used over-the-road...	3	4	5	16.5
00.27	Trailers and trailer-mounted con- tainers.....	5	6	7	10.0
00.28	Vessels, barges, tugs and similar water transportation equipment, except those used in marine contract construction.....	14.5	18	21.5	6.0

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
01.0 to 79.0	DEPRECIABLE ASSETS USED IN THE FOLLOWING ACTIVITIES				
01.0	Agriculture: Includes only such assets as are identified below and that are used in the production of crops or plants, vines and trees (including forestry); the keeping, grazing, or feeding of livestock for animal products (including serums), for animals increase, or value increase; the operation of dry lot or farm dairies, nurseries, greenhouses, sod farms, mushroom cellars, cranberry bogs, apiaries, and fur farms; the production of bulb, flower, and vegetable seed crops; and the performance of agricultural, animal husbandry and horticultural services.				
01.1	Machinery and equipment, including grain bins and fences but no other land improvements.....	8	10	12	11.0
01.2	Animals:				
01.21	Cattle, breeding or dairy.....	5.5	7	8.5
01.22	Horses, breeding or work.....	8	10	12
01.23	Hogs, breeding.....	2.5	3	3.5
01.24	Sheep and goats, breeding.....	4	5	6
01.3	Farm buildings ¹	20	25	30.0	5.0
10.0	Mining: Includes assets used in the mining and quarrying of metallic and nonmetallic minerals (including sand, gravel, stone, and clay) and the milling beneficiation and other primary preparation of such materials.....	8	10	12	6.5
13.0	Petroleum and natural gas production and related activities:				
13.1	Drilling of oil and gas wells: Includes assets used in the drilling of oil and gas wells on a contract, fee or other basis and the provision of geophysical and other exploration services; and the provision of such oil and gas field services as chemical treatment, plugging and abandoning of wells and cementing or perforating well casings; but not including assets used in the performance of any of these activities and services by integrated petroleum and natural gas producers for their own account.....	5	6	7	10.0

¹ Includes only property which is "eligible property" as defined in section 1.167 (a)-11 (b) (2) of the Income Tax Regulations, such as certain special-purpose structures and certain research and storage facilities (but not a building and its structural components).

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
13.2	Exploration for petroleum and natural gas deposits: Includes assets used for drilling of wells and production of petroleum and natural gas, including gathering pipelines and related storage facilities, ¹ when these are related activities undertaken by petroleum and natural gas producers.....	11	14	17	4.5
13.3	Petroleum refining: Includes assets used for the distillation, fractionation, and catalytic cracking of crude petroleum into gasoline and its other components.	13	16	19	7.0
13.4	Marketing of petroleum and petroleum products: Includes assets used in marketing, such as related storage facilities and complete service stations, ¹ but not including any of these facilities related to petroleum and natural gas trunk pipelines.....	13	16	19	4.0
15.0	Contract Construction: Includes such assets used by general building, special trade, heavy construction and marine contractors; does not include assets used by companies in performing construction services on their own account.				
15.1	Contract construction other than marine.	4	5	6	12.5
15.2	Marine contract construction.....	9.5	12	14.5	5.0
20.0	Manufacture of foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls:				
20.1	Grain and grain mill products: Includes assets used in the production of flours, cereals, livestock feeds, and other grain and grain mill products.....	13.5	17	20.5	6.0
20.2	Sugar and sugar products: Includes assets used in the production of raw sugar, syrup or finished sugar from sugar cane or sugar beets.....	14.5	18	21.5	4.5
20.3	Vegetable oils and vegetable oil products: Includes assets used in the production of oil from vegetable materials and the manufacture of related vegetable oil products.....	14.5	18	21.5	3.5
20.4	All other food and kindred products: Includes assets used in the production of foods, beverages and related production not included in classes 20.1, 20.2, and 20.3.....	9.5	12	14.5	5.5

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
21.0	Manufacture of tobacco and tobacco products: Includes assets used in the production of cigarettes, cigars, smoking and chewing tobacco, snuff and other tobacco products.....	12	15	18	5.0
22.0	Manufacture of textile mill products:				
22.1	Knitwear and knit products: Includes assets used in the production of knit apparel and other finished articles from yarn.....	7	9	11	7.0
22.2	Textile mill products, except knitwear: includes assets used in the production of spun, woven or processed yarns and fabrics; of mattresses, carpets, rugs, pads, and sheets, and of other products of natural or synthetic fibers.....	11	14	17	4.5
22.3	Finishing and dyeing: Includes assets used in the finishing and dyeing of natural and synthetic fibers, yarns, and fabric and knit apparel.....	9.5	12	14.5	5.5
23.0	Manufacture of apparel and other finished products: Includes assets used in the production of clothing and fabricated textile products by the cutting and sewing of woven fabrics, other textile products and furs; but does not include assets used in the manufacture of apparel from rubber and leather.....	7	9	11	7.0
24.0	Manufacture of lumber and wood products:				
24.1	Cutting of timber: Includes logging machinery and equipment and road building equipment used by logging and sawmill operators and pulp manufacturers on their own account.	5	6	7	10.0
24.2	Sawing of dimensional stock from logs: Includes machinery and equipment installed in permanent or well-established sawmills.....	8	10	12	6.5
24.3	Sawing of dimensional stock from logs: Includes machinery and equipment installed in sawmills characterized by temporary foundations and a lack, or minimum amount, of lumber-handling, drying, and residue-disposal equipment and facilities.....	5	6	7	10.0
24.4	Manufacture of lumber, wood products and furniture: Includes assets used in the production of plywood, hard-board, flooring, veneers, furniture and other wood products, including the treatment of poles and timber.....	8	10	12	6.5

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
26.0	Manufacture of paper and allied products:				
26.1	Manufacture of pulps from wood and other cellulose fibers and rags: Includes assets used in the manufacture of paper and paperboard, but does not include the assets used in pulp-wood logging nor the manufacture of hardboard.	13	16	19	4.5
26.2	Manufacture of paper and paperboard: Includes assets used in the production of converted products such as paper coated off the paper machine, paper bags, paper boxes, and envelopes. . . .	9.5	12	14.5	5.5
27.0	Printing, publishing and allied industries: includes assets used in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; the performance of services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping; and the publication of newspapers, books, and periodicals, whether or not carried out in conjunction with printing. . . .	9	11	13	5.5
28.0	Manufacture of chemicals and allied products: Includes assets used in the manufacture of basic chemicals such as acids, alkalies, salts, and organic and inorganic chemicals; chemical products to be used in further manufacture, such as synthetic fibers and plastics materials, including petro-chemical processing beyond that which is ordinarily a part of petroleum refining; and finished chemical products, such as pharmaceuticals, cosmetics, soaps, fertilizers, paints and varnishes, explosives, and compressed and liquified gases. Does not include assets used in the manufacture of finished rubber and plastic products or in the production of natural gas products, butane, propane, and by-products of natural gas production plants.	9	11	13	5.5
30.0	Manufacture of rubber and plastics products:				
30.1	Manufacture of rubber products: Includes assets used for the production of products from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak, such as tires, tubes, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries; and in the recapping, retreading, and rebuilding of tires.	11	14	17	5.0

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
30.2	Manufacture of miscellaneous finished plastics products: Includes assets used in the manufacture of plastics products and the molding of primary plastics for the trade. Does not include assets used in the manufacture of basic plastics materials nor the manufacture of phonograph records.	9	11	13	5.5
31.0	Manufacture of leather: Includes assets used in the tanning, currying, and finishing of hides and skins; the processing of fur pelts; and the manufacture of finished leather products, such as footwear, belting, apparel, luggage and similar leather goods.	9	11	13	5.5
32.0	Manufacture of stone, clay, glass, and concrete products:				
32.1	Manufacture of glass products: Includes assets used in the production of flat, blown, or pressed products of glass, such as plate safety and window glass, glass containers, glassware and fiberglass. Does not include assets used in the manufacture of lenses.	11	14	17	6.0
32.2	Manufacture of cement: Includes assets used in the production of cement, but does not include any assets used in the manufacture of concrete and concrete products nor in any mining or extraction process.	16	20	24	3.0
32.3	Manufacture of other stone and clay products: Includes assets used in the manufacture of products from materials in the form of clay and stone, such as brick, tile and pipe; pottery and related products, such as vitreous-china, plumbing fixtures, earthenware and ceramic insulating materials; and also includes assets used in manufacture of concrete and concrete products. Does not include assets used in any mining or extraction processes.	12	15	18	4.5
33.0	Manufacture of primary metals: Includes assets used in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap, the rolling, drawing, and alloying of ferrous and nonferrous metals; the manufacture of castings, forgings, and other basic products of ferrous and nonferrous metals; and the manufacture of nails, spikes, structural shapes, tubing, and wire and cable:				

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
33.1	Ferrous metals.	14. 5	18	21. 5	8. 0
33.2	Nonferrous metals.	11	14	17	4. 5
34.0	Manufacture of fabricated metal products: Includes assets used in the production of metal cans, tinware, nonelectric heating apparatus, fabricated structural metal products, metal stampings and other fer- rous and nonferrous metal and wire prod- ucts not elsewhere classified.	9. 5	12	14. 5	6. 0
35.0	Manufacture of machinery, except electrical and transportation equipment:				
35.1	Manufacture of metalworking machin- ery: Includes assets used in the pro- duction of metal cutting and forming machines, special dies, tools, jigs, and fixtures, and machine tool accessories. .	9. 5	12	14. 5	5. 5
35.2	Manufacture of other machines: In- cludes assets used in the production of such machinery as engines and tur- bines; farm machinery, construction, and mining machinery; general and special industrial machines including office machines and nonelectronic computing equipment; miscellaneous machines except electrical equipment and transportation equipment.	9. 5	12	14. 5	5. 5
36.0	Manufacture of electrical machinery, equip- ment, and supplies: Includes assets used in the production of machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utiliza- tion of electrical energy:				
36.1	Manufacture of electrical equipment: Includes assets used in the production of such machinery as electric test and distributing equipment, electrical in- dustrial apparatus, household appli- ances, electric lighting and wiring equipment; electronic components and accessories, phonograph records, storage batteries and ignition systems. .	9. 5	12	14. 5	5. 5
36.2	Manufacture of electronic products: Includes assets used in the production of electronic detection, guidance, control, radiation, computation, test and navigation equipment and the components thereof. Does not include the assets of manufacturers engaged only in the purchase and assembly of components.	6. 5	8	9. 5	7. 5

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
37.0	Manufacture of transportation equipment: Includes assets used in the production of such machinery as vehicles and equipment for the transportation of passengers and cargo:				
37.1	Manufacture of motor vehicles and parts: Includes assets used in the pro- duction of automobiles, trucks, trailers, buses and their component parts.....	9.5	12	14.5	5.5
37.2	Manufacture of aerospace products: Includes assets used in the production of aircraft, spacecraft, rockets, missiles and their component parts.....	6.5	8	9.5	7.5
37.3	Ship and boat building: Includes assets used in the manufacture and repair of ships and boats, but excludes dry docks.....	9.5	12	14.5	8.0
37.4	Manufacture of railroad transportation equipment: Includes assets used in the building and rebuilding of rail- road locomotives, railroad cars, and street railway cars.....	9.5	12	14.5	5.5
38.0	Manufacture of professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks: In- cludes assets used in the manufacture of mechanical measuring, engineering, labo- ratory and scientific research instruments; optical instruments and lenses; surgical, medical and dental instruments, equip- ment and supplies; ophthalmic goods, photographic equipment and supplies; and watches and clocks.....	9.5	12	14.5	5.5
39.0	Manufacture of products not elsewhere classified: Includes assets used in the production of jewelry; musical instru- ments; toys and sporting goods; pens, pencils, office and art supplies. Also includes assets used in production of motion picture and television films and tapes; as waste reduction plants; and in the ginning of cotton.....	9.5	12	14.5	5.5
40.0	Railroad transportation: Includes the assets identified below and which are used in the commercial and contract carrying of passengers and freight by rail. Excludes any nondepreciable assets included in Interstate Commerce Commission ac- counts enumerated for this class:				

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
40.1	Railroad machinery and equipment Includes assets classified in the fol- lowing Interstate Commerce Commission accounts: ¹ Road accounts: (16) Station and office build- ings (freight handling machinery and equip- ment only) (26) Communication systems (27) Signals and interlockers (37) Roadway machines (44) Shop machinery Equipment accounts: (52) Locomotives (53) Freight train cars (54) Passenger train cars (55) Highway revenue equip- ment (57) Work equipment	11	14	17	10.5
40.2	Railroad structures and similar improve- ments Includes assets classified in the fol- lowing Interstate Commerce Commission road accounts: ¹ (6) Bridges, trestles, and cul- verts (7) Elevated structure (13) Fences, snowsheds, and signs (16) Station and office build- ings (stations and other operating structures only) (17) Roadway buildings (18) Water stations (19) Fuel stations (20) Shops and enginehouses (31) Power transmission sys- tems (35) Miscellaneous structures (39) Public improvements construction	24	30	36	5.0
40.3	Railroad wharves and docks ¹ (23) Wharves and docks (24) Coal and ore wharves	16	20	24	5.5
40.5	Railroad powerplant and equipment: Electric generating equipment:				
40.51	Hydraulic	40	50	60	1.5
40.52	Nuclear	16	20	24	3.0

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
40.53	Steam.....	22.5	28	33.5	2.5
40.54	Steam, compressed air, and other powerplant equipment.....	22.5	28	33.5	7.5
41.0	Motor transport—passengers: Includes assets used in the urban and interurban com- mercial and contract carrying of passen- gers by road, except the transportation assets included in class 00.2 above.....	6.5	8	9.5	11.5
42.0	Motor transport—freight: Includes assets used in the commercial and contract carrying of freight by road, except the transportation assets included in class 00.2 above.....	6.5	8	9.5	11.0
44.0	Water transportation: Includes assets used in the commercial and contract carrying of freight and passengers by water except the transportation assets included in class 00.2 above.....	16	20	24	8.0
45.0	Air transport: Includes assets used in the commercial and contract carrying of passengers and freight by air.....	5	6	7	14.0
46.0	Pipeline transportation: Includes assets used in the private, commercial, and contract carrying of petroleum, gas, and other products by means of pipes and conveyors. The trunklines and related storage facilities of integrated petroleum and natural gas producers are included in this class ¹	17.5	22	26.5	3.0
48.0	Communication: Includes assets used in the furnishing of point-to-point communica- tion services by wire or radio, whether intended to be received aurally or visually; and radio broadcasting and television.				
48.1	Telephone: Includes the assets identified below and which are used in the provision of commercial and contract telephonic services:				
48.11	Central office buildings: Special pur- pose structures intended to house central office equipment and which are classified in Federal Communica- tions Commissions Account No. 212 ¹ ..	36	45	54	1.5
48.12	Central office equipment: Includes central office switching and re- lated equipment classified in Federal Communications Com- mission Account No. 221.....	16	20	24	6.0

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
48.13	Station equipment: Includes such station apparatus and connections as teletypewriters, telephones, booths, and private exchanges as are classified in Federal Communications Commission Account Nos. 231, 232, and 234.....	8	10	12	10.0
48.14	Distribution plant: Includes such assets as pole lines, cable, aerial wire and underground conduits as are classified in Federal Communications Commission Account Nos. 241, 242.1, 242.2, 242.3, 242.4, 243, and 244.....	28	35	42	2.0
48.2	Radio and television broadcasting.....	5	6	7	10.0
49.0	Electric, gas, and sanitary services:				
49.1	Electric utilities: Includes assets used in the production, transmission and distribution of electricity for sale, including related land improvements, ¹ and identified as:				
49.11	Hydraulic production plant: Includes dams, flumes, canals and waterways. Also includes jet engines and other internal combustion engines used to operate auxiliary facilities for load shaving purposes or in case of emergencies.....	40	50	60	1.5
49.12	Nuclear production plant: Includes jet engines and other internal combustion engines used to operate auxiliary facilities for load shaving purposes or in case of emergencies.....	16	20	24	3.0
49.13	Steam production plant: Includes jet engines and other internal combustion engines used to operate auxiliary facilities for load shaving purposes or in case of emergencies.....	22.5	28	33.5	2.5
49.14	Transmission and distribution facilities.....	24	30	36	2.0
49.2	Gas utilities: Includes assets used in the production, transmission, and distribution of natural and manufactured gas for sale, including related land improvements ¹ and identified as:				

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
49.21	Distribution facilities: Including gas water heaters and gas conversion equipment installed by utility on customers' premises on a rental basis.....	28	35	42	2.0
49.22	Manufactured gas production plant.....	24	30	36	2.0
49.23	Natural gas production plant.....	11	14	17	4.5
49.24	Trunk pipelines and related storage facilities.....	17.5	22	26.5	3.0
49.3	Water utilities: Includes assets used in the gathering, treatment, and commercial distribution of water.....	40	50	60	1.5
49.4	Central steam production and distribution: Includes assets used in the production and distribution of steam for sale.....	22.5	28	33.5	2.5
50.0	Wholesale and retail trade: Includes assets used in carrying out the activities of purchasing, assembling, storing, sorting, grading, and selling of goods at both the wholesale and retail level. Also includes assets used in such activities as the operation of restaurants, cafes, coin-operated dispensing machines, and in brokerage of scrap metal.....	8	10	12	6.5
70.0	Services: Includes assets used in the provision of personal services such as those offered by hotels and motels, laundry and dry cleaning establishments, beauty and barber shops, photographic studios and mortuaries. Includes assets used in the provision of professional services such as those offered by doctors, dentists, lawyers, accountants, architects, engineers, and veterinarians. Includes assets used in the provision of repair and maintenance services. Includes equipment or facilities used by cemetery organizations, news agencies, teletype wire services, plumbing contractors, frozen food lockers, research laboratories, hotels, and motels (except office furniture and fixtures).....	8	10	12	6.5

Asset guide- line class	Description of assets included	Asset depreciation range (in years)			Annual asset guide- line repair allow- ance percent- age
		Lower limit	Asset guide- line period	Upper limit	
79.0	Recreation and amusement: Includes assets used in the provision of amusement or entertainment services on payment of a fee or admission charge, as in the operation of bowling alleys, billiard and pool establishments, theaters, concert halls, amusement parks, and miniature golf courses. Does not include such assets which consist primarily of specialized land improvements or structures, such as golf courses, sports stadia, racetracks, ski slopes, or buildings which house bowling alleys.	8	10	12	6.5

SEC. 3. EFFECT ON OTHER DOCUMENTS.

The provisions of Revenue Procedure 62-21, C.B. 1962-2, 418, do not apply to assets with respect to which

the annual allowance for depreciation is, in accordance with the taxpayer's election, determined under the provisions of section 1.167(a)-11 of the regulations.

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